



External Assessment Report 2014

Subject(s)	Health and Food Technology
Level(s)	Higher

The statistics used in this report are prior to the outcome of any Post Results Services requests

This report provides information on the performance of candidates which it is hoped will be useful to teachers/lecturers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding. It would be helpful to read this report in conjunction with the published question papers and marking instructions for the examination.

Comments on candidate performance

General comments

The numbers of candidates presented for Health & Food Technology has shown a slight increase this year despite there being two fewer presenting centres. Six centres were new and thirteen centres returning. Most candidates embark on the Higher Health and Food Technology course having studied Standard Grade Home Economics or Intermediate 2 Health and Food Technology, but almost 37% are direct entries with no previous experience. This is a trend which is on the increase from previous years.

As the specification for Higher Health & Food Technology remained the same as in previous years, the grade boundaries stayed the same.

80% of candidates achieved grades A–C in the examination, but almost 20% of the candidates were awarded a Band D or No Award. By examining the breakdown of the component marks it is possible to establish the areas that centres may wish to address in teaching and learning. (See guidance in sections later in this report.)

9.5% of the candidates were awarded a Band 8 or 9, and should perhaps have been presented at Intermediate 2 Health and Food Technology. As the technological briefs are the same for Intermediate 2 and Higher, it is possible to drop candidates down if the candidate has not demonstrated sufficient knowledge and/or answering technique throughout the course assessments.

The average mark for the Technological Project has slightly increased from last year; the average mark for the exam paper remained the same. Ways of improving candidate performance can be established by following the guidance later in this document.

Technological Project

Areas where candidates performed well	Areas which candidates found demanding
Step 1.1	
The vast majority of candidates ensured that the brief was correctly copied from the wording on the SQA website. Most candidates provided good explanations of the key wording of the brief. Those candidates who showed better understanding in the explanations of the key points tended to demonstrate better understanding of the brief which benefitted them at later stages of their project.	Some candidates struggled to explain European, school, canteen and sale adequately. Candidates who grouped key points together rather than giving them separately lost marks for not giving an explanation of each key point. Candidates who provided dictionary definitions rather than explanations did not gain marks. Some very brief explanations were given.

<p>Step 1.2</p>	
<p>Specification points were linked well to the key points by most candidates. The candidates who developed specification points that clearly linked to the core key points from the wording of the brief tended to produce better solutions in step 2.2 as their work was more focused. Generally the candidates produced between five and six specifications points, and only a few produced 7 or more. This avoided additional work at later stages.</p> <p>More candidates demonstrated understand measuring /testing of each specification point.</p> <p>Most candidates explained in detail the importance of each specification point and showed knowledge in their explanations.</p>	<p>The key points are not being carried forward by some candidates, and this carries on into step 1.3 investigations. Those candidates who gave double specification points were disadvantaged in a number of areas as they would not fully explain or evaluate the whole (both parts) specification point.</p> <p>A few candidates did not number their specification points. Some candidates are using previous Marking Instructions to identify techniques for measuring. This can result in the measurement/explanation not being linked to the candidate's specification point and so prevented them from gaining marks. A few failed to earn marks as they did not use the correct terminology (eg 'ask', 'get feedback') or identified inappropriate experts. Candidates should refer to the Candidate Guide for correct measuring/testing techniques.</p>
<p>Step 1.3</p>	
<p>The candidates who covered all the core key points and the specification points in the investigations earned the highest marks and provided the most focused list of investigations.</p>	<p>A key word missed in the specification and also omitted in the investigations was 'develop'. Some investigations were simply a repeat of the specification points.</p> <p>A number of candidates did not carry forward from the proposed list of investigations on p7 the investigations they intended to carry out on p8 and often changed the investigation and the technique.</p> <p>Many candidates were using the teacher as the only expert for the investigations.</p>
<p>Step 2.1</p>	
<p>Centres who made good use of the candidate guide provided strong investigations which provided valuable data</p>	<p>Some candidates provided minimal investigations which did not allow sufficient data to be collected to allow the creation of interesting solutions which related to their</p>

<p>to use when drawing up a solution.</p> <p>Generally the resources were clearly identified. However, on occasion some candidates omitted the name or position of the expert who was used for the research.</p> <p>A few candidates put too much information on p8 which was not subsequently investigated.</p>	<p>specifications. Some candidates are not displaying all results for the investigations and are only asking four questions in an interview.</p> <p>Costing continues to be poorly carried out as valid sources are not given.</p> <p>Literary/internet search requires 3 different sources for a valid investigation 2014 onwards.</p>
<p>Step 2.2</p>	
<p>Some candidates came up with original solutions based on good research from the data collected in their investigations. The solutions were clearly linked to wording of the brief and described in detail with exact ingredients and step by step method.</p>	<p>Some candidates produced very simple solutions or failed to develop new food products. This fails to meet the wording of the brief to 'develop' a new dish or food product. Candidates should use metric measurements and not write '½ onion, 1 carrot' etc.</p>
<p>Step 3.1</p>	
<p>Most candidates provided sufficient detail about how to manufacture their chosen solution which could allow it to be produced exactly by another person.</p> <p>Good justifications showed an understanding of the functional properties of the ingredients, nutritional contribution or aesthetic appeal.</p> <p>Justifications such as adds colour or flavour repeatedly is vague and repetitive.</p>	<p>Candidates should include the date. Some candidates failed to provide sufficient detail to allow the preparation of the solution. Time — some tasks taking too long.</p> <p>Hygiene — some candidates failed to include hygiene throughout the preparation of the solution: hand washing after preparing raw chicken and washing of fruit and vegetables.</p> <p>Equipment was often missing, and type of knife not stated.</p> <p>Some justifications are very repetitive, preventing candidates from gaining marks.</p>
<p>Step 3.2</p>	
<p>When candidates prepared tests which covered all of the specifications points this provided good data for evaluation against the spec in 4.1.</p>	<p>Questions or tests did not focus on the specification points which did not allow an evaluation in the next stage to be based on evidence.</p>

Step 3.3	
<p>Candidates who made good use of the Candidate Guide provided strong valid testing which provided valuable data to use in the evaluation section particularly step 4.1.</p>	<p>Some candidates failed to identify the details of the expert they were interviewing.</p> <p>In some cases the testing failed to assess whether the solution met all the specification points and few candidates asked for comments on improving or modifying the solution which would provide information for the evaluation.</p>
Step 4.1	
<p>Candidates who conducted testing against each of the specification points gave themselves data on which to base their evaluations. If the candidates provided the opinion, linked to the fact which can be seen within the content of the technological project and then recognised the consequence in terms of the proposed solution they earned the marks — Opinion/Fact/Consequence (OFC).</p>	<p>Some candidates are able to evaluate using OFC but are inaccurate in the factual information they are providing, or make the consequence a repeat of the opinion ('I have met this specification point as...fact and so I have met the specification point').</p> <p>Evaluation was not backed up by testing and often included personal opinions and inaccurate interpretation of results did not earn marks. There was not always evidence of costing to back up evaluation in some projects. Supermarket websites are a valuable resource for costing data.</p> <p>Many candidates are not picking up the extra mark available for additional detail in this section.</p>
Step 4.2	
<p>Candidates showed some improvement in the technique in this area and were making reference to time, resources and skills.</p> <p>Candidates who made obvious links to time, resources and skills and abilities which could be backed up by evidence in the technological project and then linked the consequence for the final solution earned the marks.</p>	<p>Some candidates gave unsupported, personal comments/statements in their attempt to complete the evaluation. Candidates wrote about previous experience in Standard Grade, Int 2 Practical Cookery, previous practising in class. This is not evidence that can be used as the basis of the evaluations.</p> <p>The candidates are not always linking the evaluative comments to the consequence for the final solution and so are failing to include a valid consequence in the</p>

	<p>evaluative comment.</p> <p>This area of the project is still found to be the most difficult for the candidates although there is some improvement.</p>
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Candidate Performance in Health & Food Technology Written Paper

These comments should be read in conjunction with the examination paper and the marking instructions which will be available on the SQA website. The comments include areas where candidates performed well and areas they found demanding and so helps provide guidance on improving candidate performance.

Section A

Question

- 1 Well answered
- 2 Well answered
- 3 Majority got marks
- 4 Majority got marks - some vague answers not linked to Fair Trade foods particularly.
- 5 Lack of knowledge of the source of these bacteria.
- 6 Some candidates did not spell this abbreviation correctly.
- 7 Lack of understanding of 'due diligence'
- 8 Poorly answered – lack of knowledge of the term hydrogenation.
- 9 Well answered
- 10 Well answered
- 11 Most candidates gained 2 marks
- 12 Reasonably well answered
- 13 Well answered
- 14 Good knowledge demonstrated of cook – chill products

Section B Question 1- Compulsory Question

	Facts about performance	Action Required
1a	<p>The majority of the candidates used OFC in their answers and correctly referred to the overweight 8 year old boy in each response.</p> <p>Energy – well answered</p> <p>Protein – well answered</p> <p>Vitamin B1– few candidates chose this</p>	<p>Candidates must provide all stages of the answer — an opinion based on the data on the table, linked to the person in the wording of the question. They must then demonstrate their knowledge of the function of the nutrient and then provide a consequence in relation to the impact on health of the person.</p> <p>Some candidates' answers were poorly</p>

	<p>nutrient.</p> <p>Phosphorus – most candidates had knowledge of this nutrient.</p> <p>Vitamin A – well answered</p> <p>Saturated fat – candidates lacked knowledge of 11% of total food energy.</p> <p>Iron – well answered</p>	<p>structured.</p> <p>On occasion some candidates do not have sufficient knowledge about the impact of too much or too little of a nutrient on the person in the question.</p> <p>The fact about the nutrient must link to the consequence given.</p>
<u>1b</u>	<p>Candidates lacked knowledge of the effect of heat on these nutrients.</p>	<p>Starch was answered better than vitamin C. Responses lacked mention of heat.</p> <p>Explanations for gelatinisation were poor.</p>
<u>1c</u>	<p>Answered fairly well with some good knowledge of value of NSP in the diet. Some responses lacked depth of explanation.</p>	<p>This question can be repeated for other foods — see previous papers.</p>
<u>1d</u>	<p>Candidates demonstrated knowledge of factors contributing to hypertension.</p> <p>Some candidates gave non dietary factors such as stress and lack of exercise.</p>	<p>Lack of knowledge for explanations as some candidates simply stated salt causes hypertension.</p> <p>This question can be repeated for other dietary diseases – see previous papers and course content.</p>

Choice Questions - Question 2

	Facts about performance	Action Required
2a	<p>Well answered by the majority of the candidates that selected this question.</p> <p>A few candidates lacked knowledge of the product development strategy.</p> <p>A few candidates failed to refer to the cupcake in each response and so lost marks.</p>	<p>The explanations given by the candidates for each stage have improved. Some stages are still being incorrectly identified, and there is confusion with concept generation and concept screening, product testing and prototype production</p> <p>Practice linked to various food products in the different styles of this question — see previous papers.</p>
2b	<p>All attributes of the product were well done with many giving good evaluations which referred to and showed knowledge of the</p>	<p>Practice food focused products in the different styles of this question which appear frequently.</p>

	needs of toddlers Candidates demonstrated some good evaluative technique in this question.	Answers must refer to the product that is used in the question and show an understanding of the star profile rating linked to the number. 5 = very high, 4 = high 2= low and 1 = very low etc. Many candidates lost marks as they did not differentiate between the value of 4 and 5 or 2 and 1.
2c	Good knowledge of influence on consumer choice of food	Candidates answered available knowledge better than nutritional knowledge.
2d	Poor evaluation technique for this question	Improve knowledge on usefulness of food labels
2e	Candidate's responses were vague and did not link to the consumer or to Consumer Protection from Unfair Trading Regulations (CPRs) 2008. Most candidates made a link to misleading information.	Improve knowledge of CP Regulations.

Question 3

	Facts about performance	Action Required
3a	Good knowledge of nutritional suitability of the meal for an athlete. Good evaluative technique.	Candidates did not gain marks for not linking to an athlete. Practise similar questions.
3b	Candidates demonstrated limited knowledge of disassembly and did not link answers to the manufacturer.	Improve knowledge of the use of disassembly of food products in the food product development process.
3c	Answers not linking to HACCP and simply providing hygiene rules. Some candidates did have good knowledge of HACCP system in food production	Candidates should practice responses for other food products and stages in HACCP.
3d	Candidates had good knowledge of online shopping for food. Evaluative technique lacking at times.	Develop knowledge of online shopping and benefits to the consumer.

3e	Candidates lacked specific knowledge of the function of ingredients in food products. Liquid was poorly answered.	Improve knowledge on functional properties of foods.
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Question 4

	Facts about performance	Action Required
4a	Well answered by the candidates. Some lacked depth in the explanations	Develop knowledge of benefits of breast feeding.
4b	Candidates had a lack of knowledge of GM foods with Organic being answered much better.	Practise this type of question for other areas of food politics.
4c	Candidates mainly answered linked to functional properties of eggs, some gave nutrition value.	Repeat this question for other food ingredients.
4d	Not well answered by many candidates who lacked knowledge of functional foods and confused with convenience foods.	Practise questions on other technological developments
4e	Candidates lacked knowledge of Sale and Supply of Goods Act	Develop knowledge of Acts as detailed in course content.

Advice to centres for preparation of future candidates

Technological Project

- ◆ Centres must ensure they use the up to date version of the Teacher Guide and Candidate Guide for the Technological Project. It can be downloaded from the SQA website. This will be available when the new briefs are published. Please ensure that the updated proforma is used.
- ◆ Candidates should check that each step has been completed in line with the Candidate Guide to ensure they maximise the marks they earn.
- ◆ Candidates may find it helpful to identify a target group for their project as this may help them to focus on the needs of this particular group and so produce a more in-depth piece of work.
- ◆ Candidates should take responsibility for checking that each page of the project has been correctly collated and is included in the final work submitted to the SQA.

- ◆ The sections which required evaluation skills caused most problems. This is the area that needs to be addressed to improve the candidate marks. Complete the evaluation of each step of the technological project at the time identified in the candidate guide. Candidates should make sure that they write their evaluations based on evidence.
- ◆ The technological project should meet the requirements of the unit outcomes so that the NAB pass can be awarded.
- ◆ If you have presented candidates for three years, you are encouraged to become involved in the marking of the technological project so that you have a greater understanding of how candidates gain marks. Markers always state how valuable marking is in helping to raise their candidate's attainment. Information on how to apply to become a Marker can be found on the SQA's website in the Appointee Management section.
- ◆ Although the marking instructions for the projects are available on the SQA website, candidates should be encouraged to come up with their own specification points, investigations and tests which will then be more clearly focused on the wording of the brief.

Written paper

- ◆ Candidates who have applied the correct answering technique achieve a higher mark than centres where there has been less emphasis on answering technique. Those candidates who could answer evaluation questions correctly in the choice questions tended to score higher total marks for their papers.
- ◆ Candidates should use the mark allocation to establish how many answers they should provide — in some areas too much was written, and in other areas not enough.
- ◆ Create a well-balanced prelim which meets the correct paper specification. This will prepare the pupils well for the written examination. This evidence can also be used to generate evidence for Exceptional Circumstances and Post Results Services if required.
- ◆ Encourage candidates to use the SQA website for past papers, update letters, marking instructions, Understanding Standards materials etc.
- ◆ Practice all past Section A questions and encourage candidates to create their own Section A questions. Candidates who are well prepared for Section A demonstrate a wide knowledge of the course content and may therefore perform well in the rest of the paper.
- ◆ The questions towards the end of Section A are more difficult and require more detail when they have the wording 'advantage', 'disadvantage', etc.
- ◆ Practice Section B question 1 to ensure that the candidates can answer Nutrition evaluation questions. A few candidates have gaps in their knowledge of nutrition.

- ◆ Although candidates use evaluation skills in question 1, they often do not apply the same answering technique in the choice questions. The candidates frequently have the knowledge but as they fail to evaluate they lose valuable marks.
- ◆ Dietary targets / goals — a number of pupils did not know the whole dietary targets/goal in sufficient detail for higher. 'Five-a-day' is not acceptable at higher level. Pupils should know the full target eg Increase consumption of fruit and vegetables to 400g per day.
- ◆ There is even confusion with the foods or nutrients used in the target, eg 'increase intake of calcium' or 'consume more red meat'. Candidates must learn the actual dietary targets. The dietary goals should be known by candidates.
- ◆ Allowing candidates to mark a copy of a candidate written paper illustrates how marks are lost and gained, which is useful in training candidates on answering technique.
- ◆ Candidates can use bullet points to reduce the amount of writing and so save time, but must still ensure that they refer to the wording of the question.
- ◆ Note HFT can use some questions from previous LCT papers as additional sources of questions for homework etc
- ◆ An excellent way to prepare pupils is for them to sit a valid prelim with a similar style of questions to the current questions, so it would be advisable to compile questions from the previous three or four years. Avoid issues linked to 'en bloc' by avoiding using a complete question from any previous paper. Mix up questions from previous papers. It would be useful, but not essential, to change the focus of the questions eg if the question is focused on a Chinese dish change the question to one on a pasta dish. Note: ½ marks have not been used for a number of years and questions using half marks should be changed to 1 mark questions in line with the current papers.
- ◆ Examine the current years Marking Instructions for Higher Health & Food Technology. This is the standard that should be applied when marking previous questions and prelims. When previous marking instructions were written they were sometimes written as outline instructions and do not provide as much detail as current instructions.
- ◆ If you have taught this course for a minimum of three years the best way to understand standards is to apply for marking the question paper. See SQA website for details.

Statistical information: update on Courses

Number of resulted entries in 2013	846
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Number of resulted entries in 2014	953
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Statistical information: Performance of candidates

Distribution of Course awards including grade boundaries

Distribution of Course awards	%	Cum. %	Number of candidates	Lowest mark
Maximum Mark 150				
A	20.3%	20.3%	193	105
B	31.0%	51.2%	295	90
C	28.8%	80.0%	274	75
D	11.0%	91.0%	105	67
No award	9.0%	-	86	-

General commentary on grade boundaries

- ◆ While SQA aims to set examinations and create marking instructions which will allow a competent candidate to score a minimum of 50% of the available marks (the notional C boundary) and a well prepared, very competent candidate to score at least 70% of the available marks (the notional A boundary), it is very challenging to get the standard on target every year, in every subject at every level.
- ◆ Each year, SQA therefore holds a grade boundary meeting for each subject at each level where it brings together all the information available (statistical and judgemental). The Principal Assessor and SQA Qualifications Manager meet with the relevant SQA Business Manager and Statistician to discuss the evidence and make decisions. The meetings are chaired by members of the management team at SQA.
- ◆ The grade boundaries can be adjusted downwards if there is evidence that the exam is more challenging than usual, allowing the pass rate to be unaffected by this circumstance.
- ◆ The grade boundaries can be adjusted upwards if there is evidence that the exam is less challenging than usual, allowing the pass rate to be unaffected by this circumstance.
- ◆ Where standards are comparable to previous years, similar grade boundaries are maintained.
- ◆ An exam paper at a particular level in a subject in one year tends to have a marginally different set of grade boundaries from exam papers in that subject at that level in other years. This is because the particular questions, and the mix of questions, are different. This is also the case for exams set in centres. If SQA has already altered a boundary in a particular year in, say, Higher Chemistry, this does not mean that centres should necessarily alter boundaries in their prelim exam in Higher Chemistry. The two are not that closely related, as they do not contain identical questions.
- ◆ SQA's main aim is to be fair to candidates across all subjects and all levels and maintain comparable standards across the years, even as arrangements evolve and change.