



External Assessment Report 2013

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

The statistics used in this report are pre-appeal.

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 number of candidates presented for Health & Food Technology has shown a slight decrease this year, although there were 11 new centres were presenting for the first time. Most candidates embark on the Higher Health & 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 and is interesting to note.

The external assessment — the question paper and Technological Project — functioned as intended, and there was no requirement to make any grade boundary adjustments.

79.7% of candidates achieved grades A–C in the examination, but almost 20.3% 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 should be addressed to ensure that future candidates pass the external assessment.

10.3% of the candidates were awarded a Band 8 or 9 and should have, perhaps, been presented at Intermediate 2. As the Technological Project 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.

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		
Step 1.1	The majority of candidates ensured that the brief was correct. 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 the Technological Project.	Some candidates struggled to explain Scottish produce, vitamin D and containing adequately. Candidates who grouped key points together lost marks for not giving an explanation of each key point. Some very brief explanations were given.
Step 1.2	Specification points were linked well to the key points by most candidates. The candidates who developed	The key points are not being carried forward by some candidates, and this carried over into step 1.3 investigations. Those

	<p>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 5–6 specifications points, and only a few produced 7 or more. This avoided additional work at later stages.</p> <p>More candidates demonstrated that they 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>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 used 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 they cannot gain full marks. A few failed to gain the marks as they did not use the correct terminology — candidates should make reference to the Candidate Guide and use the correct terminology for measuring or testing techniques.</p>
Step 1.3	<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'. This produced less focused investigations.</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 interviewed in an investigation.</p>
Step 2		
Step 2.1	<p>Centres who made good use of the candidate guide provided strong investigations, which provided valuable data to use when drawing up a solution.</p> <p>Generally the resources were clearly identified. However, on occasion some candidates omitted the name or</p>	<p>Some candidates provided minimal investigations that did not collect sufficient data to allow the creation of interesting solutions that related to their 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</p>

	position of the expert who was used for the research.	valid sources are not given.
Step 2.2	Some candidates came up with some 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 detailed recipes with exact ingredients and step-by-step method.	Some candidates produced very simple solutions or failed to develop or create new food products. This fails to meet the wording of the brief where the candidates were asked to 'develop' a new dish or food product. Candidates should use metric measurements and not write ½ onion, 1 carrot etc.
Step 3		
Step 3.1	<p>Most candidates provided sufficient detail about how to manufacture their chosen solution to 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>Candidates are reminded they 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 are 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 was not stated.</p>
Step 3.2	When candidates prepared tests that covered all of the specifications points, this provided good data for evaluation against the spec in 4.1.	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.
Step 3.3	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>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		
Step 4.1	Candidates who conducted testing against each of the specification points gave themselves data on which to	Some candidates are able to evaluate but are inaccurate in the factual information they are providing, or make the consequence a

	<p>base their evaluations. If the candidates provided opinion, linked to fact that 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.</p>	<p>repeat of the opinion (<i>I have met this specification point as...fact and so I have met the specification point</i>).</p> <p>Evaluations were not backed up by testing, and often included personal opinions and inaccurate interpretation of results, so they did not earn marks. There was not always evidence of costing to back up evaluation. 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 earned the marks when they made obvious links to time, resources and skills and abilities that could be backed up by evidence in the technological project, and then recognised the consequence for the final solution.</p>	<p>Some candidates gave unsupported, personal comments/statements in their attempt to complete the evaluation. Candidates wrote about previous experience in Standard Grade, Intermediate 2, and Hospitality. This is not evidence that can be used as the basis of the evaluations.</p> <p>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 evaluative comment.</p> <p>This area of the project was still the most difficult for the candidates, although there was an improvement from last year.</p>

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 – some giving soft cheese and eggs (not raw)

- 4 Majority got marks - some giving statutory information
- 5 Majority got marks
- 6 Majority got marks
- 7 Majority got marks
- 8 Poorly answered – many not aware of CPRs
- 9 Well answered
- 10 Not well answered – lack of knowledge of functional foods.
- 11 Most candidates gained 1 mark – some giving dietary factors.
- 12 Reasonably well answered but some responses not linked to food and some confusion with breastfeeding.
- 13 Poorly answered – lack of knowledge on disassembly
- 14 Reasonable knowledge demonstrated of extrusion cooking.

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 active female teenager in each response.</p> <ul style="list-style-type: none"> ◆ Energy – well answered ◆ Protein – well answered ◆ Vitamin B2– few candidates chose this nutrient. ◆ Vitamin A – well answered ◆ Iron – candidates stated function of iron in the body but made link with anaemia / tiredness. ◆ Calcium – well answered <p>Some candidates had gaps in their knowledge of the functions of NSP.</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 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.</p>
1b	<p>Candidates are able to identify factors well but provided vague explanations linked to obesity.</p>	<ul style="list-style-type: none"> ◆ Responses not linked to obesity or dietary factors. ◆ Responses did not always link to calories/high energy so lost marks. ◆ Some candidates think salt is linked to obesity.

1c	Answered well with some good knowledge of value of bread in the diet. Some responses lacked depth of explanation.	<ul style="list-style-type: none"> ◆ This question can be repeated for other foods — see previous papers. ◆ No link with NSP and wholemeal bread.
1d	Candidates demonstrated knowledge of fat but lacked knowledge of effect of heat on sugar.	Lack of knowledge of effects of heat on nutrients / foods. Some confusion with crystallisation and caramelisation.

Choice questions - Question 2

	Facts about performance	Action Required
2a	<p>Well answered by the majority of the candidates who 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 new soup in each response and so lost marks.</p>	<p>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.</p> <p>Practice linked to various food products in the different styles of this question – see past question papers.</p>
2b	<p>All attributes of the product were well done, with many giving good evaluations that referred to and showed knowledge of the needs of the elderly.</p> <p>Candidates demonstrated some good evaluative technique in this question.</p>	<p>Practise food-focused products in the different styles of this question, which appear frequently.</p> <p>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.</p>
2c	Good knowledge of EHD.	Candidates should link knowledge of EHD to food safety.
2d	Poorly answered — some knowledge shown of UHT but not cook-chill foods.	Improve knowledge on technological developments.
2e	Candidate's responses were vague and did not link to the consumer or to European directives.	Improve knowledge of European directives and food labelling.

Question 3

	Facts about performance	Action Required
3a	Good knowledge of food poisoning but not always linked to reasons for increase, just ways in which it can occur.	Candidates lost marks where there was no link to bacteria or food contamination.
3b	Candidates demonstrated some good evaluative technique but lacked nutritional knowledge. Some candidates linking to dietary targets instead of nutrients.	Practise evaluation technique for similar questions.
3c	Answers not linking to consumer in a few cases but, on the whole, well answered. Good knowledge of colourings and preservatives.	Candidates should practise responses for other additives.
3d	Many answers were not evaluative — OFC. Candidates did not link to food choice. Environmental issues confused with farming and living in rural areas.	Practise questions linked to consumer choice of food.
3e	Candidates lacked specific knowledge of gelatinisation in food products	Improve knowledge on functional properties of foods.

Question 4

	Facts about performance	Action Required
4a	Not well answered by the candidates. Lack of knowledge of school meals and SDT.	Practise this type of question for the dietary targets – candidates must know SDT in full at Higher level.
4b	Candidates had a lack of knowledge of mycoproteins and, to a lesser extent, MAP.	Practise this type of question for other technological developments.
4c	Candidates did not answer well or use evaluative technique. Some knowledge of sugar substitutes, but not linked to food products.	Repeat this question for other areas of food manufacture.
4d	Well answered by many candidates who demonstrated knowledge of convalescent diet.	Candidates lacked the ability to explain link between diet and recovering from an illness.

4e	Candidates lacked knowledge of DEFRA and FSA.	Candidates should be able to demonstrate the difference between the FSA and EHD. Practice questions for roles and responsibilities of other agencies.
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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, which can be downloaded from the SQA website. This will be available when the new briefs for the Technological Project are published.
- ◆ 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. 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.
- ◆ 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.
- ◆ 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 those from centres where there has been less emphasis on this. 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 that 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 absentee candidates and appeals if necessary.

- ◆ Encourage candidates to use the SQA website for past papers, update letters, marking instructions, Understanding Standards materials etc.
- ◆ Practise 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 discriminating and require more detail when they have the wording 'advantage', 'disadvantage', etc.
- ◆ Practise 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 lose valuable marks as they fail to evaluate.
- ◆ Dietary targets — a number of pupils did not know the whole dietary targets 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.
- ◆ Allowing candidates to mark a copy of a colleague's written paper illustrates how marks are lost and gained, which is useful in training them on answering technique.
- ◆ Candidates can make use of bullet points to reduce the amount of writing and so save time, but they 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 to ensure they 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 using a complete question from any previous paper — mix 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 focus to a pasta dish. Note: half-marks have not been used for a number of years, and questions using half-marks should be changed to one mark questions in line with the current papers.
- ◆ Examine the current year's Marking Instructions for Higher Health & Food Technology. This is the standard that should be applied when marking past 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 presented candidates for three years, you are encouraged to become involved in the marking of the question paper 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.

Statistical information: update on Courses

Number of resulted entries in 2012	916
Number of resulted entries in 2013	846

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	20.6%	20.6%	174	105
B	30.0%	50.6%	254	90
C	29.3%	79.9%	248	75
D	9.9%	89.8%	84	67
No award	10.2%	100.0%	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.