

## **Level 4 Advanced Diploma in Nutrition**

April 2002

### **40 Guided Learning Hours**

#### **Description:**

This is a Level 4 qualification suitable for people with supervisory responsibilities working in the catering and hospitality industries and others who are in a position to promote healthy nutrition. It is also relevant for individuals working in the health, caring or teaching professions who might have a role in the promotion of healthy eating or the preparation of meals, menus and diets. The learning outcomes cover a study of the nutritional requirements for a healthy diet, the effect of food processing and cooking on nutritional content and the effect of diet on health. These principles are then applied to catering and the role of the supervisor.

The qualification is divided into two units: *Principles of Nutrition* and *Applied Nutrition*. The qualification will be awarded to any candidate who attains the learning outcomes for both units of the qualification. Candidates who attain a *Distinction* grade for both units will be awarded a *Distinction* for the qualification.

## Unit 1: Principles of Nutrition

### Summary of Outcomes:

To achieve this unit a candidate must:

1. **Review the nutrient requirements for a healthy diet, by being able to:**
  - Define Dietary Reference Values
  - Apply the Dietary Reference Values for nutrients
  - Outline the major food sources in the diet for different nutrients
  - Explain the effects of cooking, processing and storage on the nutrient content of food.
2. **Explain the effect of diet on health, by being able to:**
  - Outline the physiological requirements of nutrients for health
  - State the beneficial and detrimental effect on health of diet.

### Content:

#### 1. Nutrient requirements

*Definitions:* Dietary Reference Values (DRVs); Reference Nutrient Intakes (RNIs); Estimated Average Requirements (EARs); Lower Reference Nutrient Intakes (LRNIs); safe intakes; relationships between terms; applications of Dietary Reference Values.

*Dietary Reference Values for nutrients:* energy; protein; biological value of proteins; carbohydrate (non-milk extrinsic sugars, intrinsic sugars, milk sugars, starches, total carbohydrate); fat (saturated and unsaturated fats, omega-3 fatty acids, total fat); non-starch polysaccharides (soluble and insoluble fibre); minerals (calcium, iron, sodium, chloride); vitamins (A, B group, C, D); variation of DRVs for different age groups, pregnant and lactating women; energy provision of the major nutrients; contribution of the major nutrients to the DRV for energy; comparison of recommended intake of nutrients with actual intake.

*Major food sources:* sources of protein, carbohydrate, fat, non-starch polysaccharide, minerals and vitamins; nutrient and energy content of major food commodities; additives and supplements; fortification and supplementation of food; food labels as sources of nutritional content; other sources of nutritional information.

*Effect of cooking, processing and storage:* boiling; poaching; frying; roasting; baking; grilling; steaming; microwaving; cook/freeze and cook/chill; freezing; drying; canning; refrigerating; irradiating.

#### 2. Effect on health

*Physiological requirements:* role of nutrients in normal growth, development and maintenance.

*Beneficial and detrimental effect:* contribution of a balanced diet to good health; The Balance of Good Health; role of diet in reducing the risk of cancer; replacement and reduction of saturated fatty acids in reducing the risk of coronary heart disease (with reference to the effect on blood lipo-proteins); obesity; anaemia; hypertension; dental caries; diabetes mellitus; food intolerances; reports and recommendations associated with these conditions such as COMA (Committee on Medical Aspects of Food Policy).

## **Assessment:**

Attainment of the Learning Outcomes for this unit will be assessed by an examination. The examination is of 2 hours duration, candidates answer four from a choice of six essay questions.

The unit is graded as either *Pass* or *Distinction*. Candidates who fail to reach the minimum standard for the *Pass* grade will be recorded as having failed the assessment.

In order to be awarded a *Distinction*, candidates must be able to recall and apply relevant knowledge and facts from the entire specification with few significant omissions and demonstrate a high level of understanding of the principles and concepts used in nutrition. All answers to examination questions will be substantially correct and relevant. Candidates who achieve a *Distinction* for this unit will be awarded a mark of 80% or greater for the assessment.

In order to be awarded a *Pass*, candidates must be able to recall relevant knowledge and facts from some parts of the specification and demonstrate a satisfactory level of understanding of the principles and concepts used in nutrition such that the candidate will be able to work satisfactorily in the catering or related industries. The majority of answers to examination questions will contain some information of relevance. Candidates who achieve a *Pass* for this unit will be awarded a mark of 50% or greater for the assessment.

## Unit 2: Applied Nutrition

### Summary of Outcomes:

To achieve this unit a candidate must:

1. **Apply the principles of nutrition to catering, by being able to:**
  - Discuss the catering and nutritional requirements of different types of establishment and population group
  - Adapt recipes, menus and cooking techniques to meet current Dietary Reference Values.
2. **Communicate information concerning nutrition, by being able to:**
  - Devise training programmes for staff in basic nutritional principles
  - Present nutritional information for customers and consumers.
3. **Demonstrate an awareness of developments in nutrition, by being able to:**
  - Discuss the effect on healthy catering of recent findings, advice and guidance relating to nutrition
  - Summarise current issues relating to nutrition and health.

### Content:

#### 1. Principles of nutrition

*Catering and nutritional requirements:* school meals; “meals on wheels”; hospitals; care homes; armed forces; works canteens; restaurants; hotels; fast-food outlets; take-aways; different age groups; pregnant and lactating women; ethnic groups; vegetarians and vegans.

*Adaptation of recipes:* modification of recipes and menus with regard to recommended intake of fat, sugars and non-starch polysaccharides; cooking methods for healthier food.

#### 2. Information concerning nutrition

*Training programmes:* nutritional concepts for kitchen staff, eg *The Balance of Good Health*; resources for training; assessment of training resources; access to training courses and qualifications.

*Present nutritional information:* information for customers in restaurants, canteens, hotels and other food outlets; promotion of healthier items and meals; use of posters and menus; presentation of food; raising nutritional awareness.

#### 3. Developments in nutrition

*Recent findings:* information from Food Standards Agency, Health Development Agency and other government bodies, British Nutrition Foundation and other professional organisations, journals, government reports and guidelines.

*Current issues:* for example GM food, organic food; possible effect on food choice and catering practices.

## **Assessment:**

Attainment of the Learning Outcomes for this unit will be assessed by two coursework assignments. Assignment 1 will be a case study that assesses the candidate's ability to apply nutritional principles to catering and communicate information concerning nutrition. The second assignment is a review of a recent article on nutrition.

The unit is graded as either *Pass* or *Distinction*. Candidates who fail to reach the minimum standard for the *Pass* grade in *both* assignments will be recorded as having failed the unit.

In order to be awarded a *Distinction*, candidates must be able to recall and apply relevant knowledge and facts from the entire specification with few significant omissions and demonstrate a high level of understanding of the principles and concepts used in nutrition. Candidates must attain a *Distinction* grade for both assignments in order to be awarded a *Distinction* for the unit.

In order to be awarded a *Pass*, candidates must be able to recall relevant knowledge and facts from some parts of the specification and demonstrate a satisfactory level of understanding of the principles and concepts used in nutrition such that the candidate will be able to satisfactorily work in the catering or related industries.

**Guidance:**

The assessments are provided by the RSPH. Dates of examinations are contained in the RSPH's timetable of examinations. Coursework assignments are internally assessed but externally moderated by examiners appointed by the RSPH.

**Award of the qualification:**

The qualification will be awarded to any candidate who attains the learning outcomes for both units of the qualification. Candidates who attain a *Distinction* grade for both units will be awarded a *Distinction* for the qualification.

**Recommended prior learning:**

There are no recommended prior learning requirements for this qualification. The RSPH does, however, recommend that candidates have a level of literacy equivalent to *Level 2* and a level of numeracy equivalent to *Level 1* (but see notes on Special Assessment Needs below).

**Key Skills:**

It is expected that the delivery of this qualification should provide opportunities for the development of the following *key skills*:

**Application of Number Levels 2 and 3**

**Communication Levels 2 and 3**

Information Technology Level 2

Guidelines for key skills are shown in Appendix 1.

**Other Issues:**

The delivery of this qualification could provide opportunities for contributing to an understanding of Spiritual, Moral, Ethical, Social and Cultural issues and an awareness of Environmental issues, Health and Safety considerations and European developments. Possible areas for discussion are shown below.

Spiritual	The qualification can contribute to an understanding of spiritual issues by allowing students to discuss how an individual's spiritual and religious beliefs may affect their diet.
Moral and Ethical	Moral and ethical issues can be developed in a discussion of the compulsory use of some additives in food and drinking water, such as fluoridation. A comparison of ill-health due to excess nutrients and ill-health due to nutrient deficiency could also develop into a discussion of moral issues. A discussion of vegetarian and vegan diets could lead to a consideration of the moral and ethical issues of eating animals and animal welfare.
Social and	A discussion of different diets such as vegetarian, vegan and ethnic

Cultural	minority diets can contribute to an understanding of social and cultural issues as can a discussion of catering in the welfare sector. The preferred ways in which different cultures preserve food could also be discussed.
Environment	Awareness of environmental issues can be raised through consideration of “organic” food and “GM” food.
European	European legislation regarding the use of additives could be discussed, as could European developments relating to the production and use of “GM” food.

**Restrictions on Candidate Entry:**

Candidates should not enter, with another awarding body, for a Level Four qualification in Nutrition.

**Special Needs:**

Centres that have candidates with special needs should consult the RSPH's *Regulations and Guidance for Candidates with Special Assessment Needs*, this is available from the RSPH and the RSPH's website [www.rsph.org.uk](http://www.rsph.org.uk)

**Recommended Qualifications and Experience of Tutors:**

The RSPH would expect that tutors have teaching experience and a qualification in a relevant subject area, but recognises that experienced teachers can often compensate for a lack of initial subject knowledge, or experienced practitioners for a lack of teaching experience.

Suitable qualifications for the Level 4 Diploma in Nutrition include:

- a) Degree or Dip. HE in:
  - Food Science
  - Nutrition
  - Dietetics
  - Home Economics
  - Biology
  - Hospitality and Catering
  - Hotel Catering and Management

or one that contains units in nutrition.

- b) HNC/D in one of the above.

The Level 4 Diploma in Nutrition has been awarded six credit points by the Hotel and Catering International Management Association (HCIMA).

Centres should be registered with the RSPH.

Any enquiries about this qualification should be made to:

The Qualifications Department,  
Royal Society for Public Health  
3<sup>rd</sup> Floor  
Market Towers  
1 Nine Elms Lane  
SW8 5NQ

## Appendix One: Key Skills Guidelines

This qualification provides a number of opportunities for candidates to develop competence in key skills and to produce evidence towards attainment of key skills. Successful completion of the qualification does not in itself imply attainment of the listed key skills; this is dependent on the candidate producing a portfolio of evidence and the teaching and learning methods adopted by the tutor(s) and candidate in the delivery of the qualification.

The specification content, which provides the most appropriate opportunity for key skill development, is signposted below.

### Application of Number

<b><i>Skill</i></b>	<b><i>Specification Content</i></b>
<b>N2.1</b> Interpret information from <b>two</b> different sources, including material containing a graph.	Dietary reference values for nutrients. Energy provision of the major nutrients; contribution of the major nutrients to the DRV for energy; comparison of recommended intake of nutrients with actual intake.  Modification of recipes and menus with regard to recommended intake of fat, sugars and non-starch polysaccharides.
<b>N2.2</b> Carry out calculations to do with: a amounts and sizes b scales and proportion c handling statistics d using formulae	As above
<b>N3.1</b> Plan and interpret information from <b>two</b> different types of sources, including a large data set.	As above

## Communication

### Skill

**C2.1a** Contribute to a discussion about a straightforward subject

### Specification Content

Discuss the catering and nutritional requirements of different types of establishment and population group.

Discuss recent findings, advice and guidance relating to nutrition and health

**C2.2** Read and summarise information from **two** extended document about a straightforward subject. One of the documents should include at least **one** image.

Assessment 2 for Unit 2

**C2.3** Write **two** different types of documents about straightforward subjects. One piece of writing should be an extended document and include at least **one** image.

Assessment for Unit 2

**C3.1a** Contribute to a group discussion about a complex subject

Discuss the catering and nutritional requirements of different types of establishment and population group.

Discuss recent findings, advice and guidance relating to nutrition and health

**C3.2** Read and synthesise information from **two** extended documents about a complex subject. One of these documents should include at least **one** image.

Assessment 2 for Unit 2

**C3.3** Write **two** different types of documents about complex subjects. One piece of writing should be an extended document and include at least **one** image.

Assessment for Unit 2

## **Information Technology**

### **Skill**

### **Specification Content**

<b>IT2.1</b>	Search for and select information for <b>two</b> different purposes	Dietary reference values for nutrients. Energy provision of the major nutrients; contribution of the major nutrients to the DRV for energy; comparison of recommended intake of nutrients with actual intake.  Modification of recipes and menus with regard to recommended intake of fat, sugars and non-starch polysaccharides.  Discuss recent findings, advice and guidance relating to nutrition and health
<b>IT2.3</b>	Present combined information for <b>two</b> different purposes. Your work must include at least <b>one</b> example of text, <b>one</b> example of images and <b>one</b> example of numbers	Assessment for Unit 2.