

WHAT IS NUTRITION SCIENCE ?

Nutrition science explores the capacity of an organism to nourish itself. It defines supply and requirements in terms of nutrients. It studies the effects of nutrient supply on the organism's functions, such as physical activity, in health and disease. Nutrition science studies the effect of diet on metabolism and the interaction of the genes with nutrients.

WHAT DOES A NUTRITIONIST DO ?

The practice of nutrition science is to advance, apply and promote understanding of the effects of nutrients on growth, development, reproductive capacity, health and well being in man and health, welfare and productivity in animals.

The function of a Nutritionist is to elicit, integrate, disseminate and apply scientific knowledge drawn from the relevant sciences, to promote an understanding of the effects of nutrition, and to enhance the impact of food on health and well-being of animals and/ or people.

The roles of Nutrition Scientists can include contributing to the growth and knowledge in nutrition for example:

- ç Research Assistant, Research Fellow, Research Programme Director, Reader or Professor: conduct, plan, manage and/or commission research.
- ç Lecturer, Senior Lecturer, Professor, and other academic teachers in higher education institutes or universities teach basic nutrition at undergraduate and postgraduate levels e.g. to: Bioscientists; Nutrition Scientists; Animal Scientists; Consumer Scientists; Agricultural Scientists; Food Scientists and Technologists; and Health Professionals among others.
- ç Lecturer, and or trainer, in initial or advanced training for vocational occupations or professions, such as: Dietitians and Doctors; Veterinary Surgeons; Sport Scientists; Fitness Instructors; Caterers and Schoolteachers among others.
- ç Nutrition Communicator, writer or director of nutrition communication,

responsible for providing externally verifiable scientific evidence – based information education and nutrition health promotion and nutrition education both directly and by vigorous exposure of assertions not based upon science ('quackery').

- ç Application of sound nutrition principles to the characterisation, preparation, processing or labelling of foods and diets to meet the needs of man for normal development and good health and/ or for health and sustainable, efficient productivity in animals.
- ç Application of sound nutrition principles to assess nutritional status in order to help healthy individuals to choose and follow healthier diets and promote physically active lifestyles; or improve performance or productivity of animals.
- ç Formulation of diets to meet the needs of man and /or of animals in health and diseases.
- ç Application of nutrition knowledge to clinical, dietetic or veterinary practice, to treat or support the recovery of the sick, normally as part of a team with or as a dually regulated health or veterinary professional.
- ç Preparation of expert advice to government and/or to professional bodies and other organisations to help formulate nutrition, food and health policy and plan nutrition programmes.

All these tasks require a guarantee of professional competence.

REGISTRATION AS A NUTRITIONIST

The requirements for Full registration as a *Registered Nutritionist* are:

a. Competence in nutrition

(i) An acceptable BSc degree with honours or postgraduate degree from a university or institute of higher education authorised to award degrees, in an appropriate subject, normally with a strong basis upon the biosciences and specialising in nutrition.

Or

(ii) An alternative qualification which is acceptable to the Registration Committee, i.e. that developed Specialist Professional Competencies in nutrition described later in this section.

After 2007, only degrees in nutrition or relevant specialist aspects of nutrition that meet guidelines for course accreditation will be deemed suitable for full registration.

b. Appropriate Experience

(i) Three years of relevant, professional experience in the past five years, with achievement and development of skills after graduation that are relevant to nutrition.

Or

(ii) Completion of a PhD in the cognate area of nutrition at a university or institute of higher education.

Or

(iii) Evidence to satisfy the Registration Committee that on the basis of substantial professional experience (seven years of an appropriate nature and level) i.e. that developed specialist professional competencies in nutrition, the requirement for **a.** may be waived.

Referees

THREE academic or professional referees are required to vouch for the applicant's educational qualifications, professional experience and current employment in nutrition.

If an applicant is transferring, only ONE referee is required.

Referees have a heavy responsibility to the public and to the registrant.

SPECIALIST COMPETENCES IN NUTRITION

Applicants eligible for registration will be able to demonstrate the following minimum competencies:

- ç Knows how to recognise strengths and weaknesses in research methods, in order to show understanding of the limitations of the scientific basis of nutritional knowledge.
- ç Knows how to formulate a diet to meet a specification appropriate for a stated situation for an individual or group of individuals.
- ç Knows how to identify or propose strategies or solutions designed to
 - EITHER** improves the health and well being of man.
 - OR** improve the welfare and/or productivity of animals.

- ç Knows how to analyse the composition of foods.
- ç Knows how to formulate a diet to meet a specification appropriate for a stated situation for an individual or group of individuals.
- ç *Animal Nutritionists would be expected to be able to demonstrate a practical ability to formulate a diet.*
- ç Knows how to assess the diet and nutritional status of individuals and groups of individuals, and is able to explain his/ her choice of methods.
- ç Knows how to plan, conduct, analyse and report on investigations into an aspect of nutrition in the laboratory and/ or in the field in a responsible, safe and ethical manner.
- ç Knows how to record, collate, analyse, interpret and report nutrition-related data using appropriate statistical methods.
- ç Shows how he or she formulates ideas and opinions in nutrition; communicates and exchanges information concerning food, nutrients, and nutrition effectively; in ways appropriate to the needs of specialist and non-specialist target audiences.

UNDERPINNING NUTRITION SUBJECT KNOWLEDGE

Graduates eligible for registration will be able to demonstrate:

- ç Understanding of the nature of nutrients (including water and alcohol); a nutrient's essentiality, conditional essentiality and dispensability, nutrient limitation and beneficial non-nutrients.
- ç Familiarity with the food sources of nutrients, and other major dietary components, including toxins and anti-nutrients.
- ç Understanding of digestion, absorption, metabolism and excretion of nutrients and an appreciation of the biological effects of inert ingesta on the organism.
- ç Understanding of the nature and extent of the metabolic demand of an organism for nutrients, the effects of altered supply and demand of each nutrient.

- ç Understanding of the role of diet, foods and nutrients in the maintenance of health and in the prevention or causation of disease or dysfunction throughout the lifecycle.
- ç Familiarity with nutritional physiology and biochemistry including:
 - ç Control of food intake and choice;
 - ç Bio-availability and utilisation;
 - ç Energy and nutrient balance;
 - ç Nutrient turnover and storage;
 - ç Nutrient-gene interactions;
 - ç Body composition;
 - ç Fertility, reproduction and lactation;
 - ç Homeostasis and homeorrhexis;
 - ç Adaptation and its limits;
 - ç Immunity & allergy.
- ç An understanding of the methods for acquiring and interpreting information about diet and nutritional status, and about the interactions between diet, health and disease.
- ç Understanding of the derivation and purpose of dietary reference values, and sources and use of standards and other reference data.
- ç Appreciation of how food production, supply, and preparation can determine chemical composition and content of dietary nutrients and other constituents
- ç Understanding of the economic, social & behavioural factors that influence food supply, choice, access, and consumption.
- ç An understanding of the links between evidence and action as a basis for policy concerned with food and nutrition in relation to public health.