

Competency Requirements For Registered Nutritionist Registration

UK Voluntary Register of Nutritionists (UKVRN)

July 2012 Amended February 2014/October 2019

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Introduction

Following consultation with existing registrants during 2010-11 on the proposed new structure for the UK Voluntary Register of Nutritionists (UKVRN), AfN Council approved the Registration Committee recommendations for changes to the structure and requirements of the Register.

1 Core Competencies in Nutrition

The following five new core competencies in nutrition will be applied to all registrants through demonstration of knowledge and understanding (for Associate registration) and through demonstration of knowledge, understanding and practical application (for Registered Nutritionists).

Core Competency 1 - Science

Knowledge and understanding of the scientific basis of nutrition. Understanding nutritional requirements from the molecular through to the population level – for either human or animal systems.

Core Competency 2 - Food or Feed Chain

Knowledge and understanding of the food or feed chain and its impact on food or feed choice. Integrating the food or feed supply with dietary intake for either human or animal systems.

Core Competency 3 - Social/Behaviour

Knowledge and understanding of food or feed in a social or behavioural context, at all stages of the life course.

Core Competency 4 - Health/Wellbeing

Understanding how to apply the scientific principles of nutrition for the promotion of health and wellbeing of individuals, groups and populations; recognising benefits and risks.

Core Competency 5 - Professional Conduct

Understanding of professional conduct and the Association for Nutrition's Code of Ethics with evidence of good character.

2 Registered Nutritionists (RNutr)

- 2.1 A single unified title Registered Nutritionist was established in June 2012, allowing all Full Registrants to use the title RNutr. The requirements for Registered Nutritionist status are:
 - evidence of knowledge and understanding in the five new core competencies in nutrition
 - evidence of application of the five core competencies to one (or more) specialist
 area of practice. NB It is expected that this level of competence will normally require
 around three out of the last five years of relevant professional experience during
 which professional skills in nutrition will have been developed
 - two professional references at least one of which would normally be from a
 Registered Nutritionist or other Registered or Chartered professional who is able to
 vouch for good character, professional educational qualifications, professional
 experience and current employment in the field of nutrition

- 2.2 Specialist areas of competence will initially be:
 - Animal
 - Food
 - Nutrition Science
 - Public Health
 - Sports & Exercise
 - Healthcare Medical
- 2.3 Separate, speciality specific listings providing examples of the detailed areas of knowledge and application for each of the five new core competencies required by Registered Nutritionist within these specialist areas have been created and are listed later in this document under the relevant headings.
- 2.4 All of these sub-categories will be of equal value. There is no separate set of letters to distinguish these differences, in order to enable better promotion of the title, both to employers and members of the public. The Register will, however, include details to show which area of specialism has been accepted for each registrant. Each Registered Nutritionist will have details of their area of specialism listed alongside their name on the Register and will, if they chose, be able to include their area of specialism as a descriptor alongside their RNutr initials on correspondence, websites, business cards etcetera, eg Dr J Jones RNutr (Animal), Miss B Smith RNutr (Public Health).
- 2.5 Although it is expected that the majority of registrants will fall into just one specialist sub-category, it is acknowledged that there may be a small number of registrants whose professional work is divided between two specialist areas. Registrants will therefore have the option to be listed under a maximum of two areas of specialism, subject to providing evidence under the competency requirements for each specialism claimed eg Mr P Brown RNutr (Food, Nutrition Science).

3 Note on title Registered Nutritionist (RNutr)

- 3.1 A Registered Nutritionist can provide advice, based on scientific evidence, on general and specific aspects of nutrition in relation to life and health in individuals and populations.
- 3.2 Registered Nutritionists may practise as independent practitioners in relation to nutrition for promotion of health both for individual clients and for groups of people or populations.
- 3.3 Registered Nutritionists may practise as part of a team under the supervision of a suitably qualified medical practitioner contributing to the management of people with medical conditions.
- 3.4 Registered Nutritionists have demonstrated knowledge, including a BSc (Hons) or MSc in a nutritional science or equivalent; applied skills in relation to nutrition, and competence to advise on nutrition in a variety of settings. They follow the Code of Ethics and Statement of Professional Conduct and are required to keep up to date through Continuing Professional Development.
- 3.5 Registered Nutritionists are expected to use their skills for the public good. They are to be aware of the limits of their competence and of the settings in which they are competent to practise.
- 3.6 A Registered Nutritionist may **not** use their title to make claims unsubstantiated by peer reviewed and published scientific evidence to directly endorse or validate a specific food or supplement.

3.7	Registration a Registered Die	as a nutritionis etitian.	does	not	entitle	the	registrant	to	represent	themselves	as	а

Definition

An Animal Nutritionist is a scientist who applies his or her basic knowledge of the anatomy, physiology, metabolism and nutrition of vertebrates to a species or genus, understands the specific characteristics of the nominated species and applies this knowledge to their welfare, dietary needs and nutritional disorders, advising others about the subject or constructing experiments to increase understanding of nutritional science of the species. Animal nutritionists may run their own consultancy, work in industry, education, academia or research.

Registered Nutritionists specialising in Animal Nutrition will have the option to use the suffix (Animal) after their title RNutr.

Core Competency 1 - Science

Knowledge and understanding of the scientific basis of nutrition. Understanding nutritional requirements from the molecular through to the population level – for either human or animal systems.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

- AN1a Scientific basis and feed sources of nutrients
- AN1b Physiology of digestion and metabolism in nominated species
- AN1c Nutrient requirements for maintenance, production and performance in nominated species eg growth, lactation, egg production and sport
- AN1d Nutrition in health and disease
- AN1e Responses of individuals and populations to nutrient intake and the effect of life stage and production on those responses
- AN1f Understanding of computer methods for ration formulation, statistics and experimental design
- AN1g Complementarity between the food needs of humans and farm animals
- AN1h Impact of animal farming systems on energy use and emissions of potential pollutants and greenhouse gases

EXAMPLES OF AREAS OF APPLICATION

Formulation of diets/feed products and management procedures for economical production, health and welfare in the food animals

Formulation of diets for non-agricultural animals eg riding horses, pets

Designing feeds to complement grass/forage in grazing animals eg horses, cattle

Designing feeding programmes that optimise the use of by-products from human food production, and lead to a net reduction in pollution and greenhouse gases

Designing products/feeding programmes for specific clients/animals

Core Competency 2 - Food Chain

Knowledge and understanding of the food chain and its impact on food choice. Integrating the food supply with dietary intake.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

AN2a - Effects of quantity and composition of dietary constituents for animals on the composition of food animals and their products

AN2b - Effects of different processing techniques on animal products for human consumption on nutrition and health in the human subject

AN2c - Legislation for the control of the industry eg food stuffs/marketing regulations and their use

AN2d - Knowledge of feedstuffs and ingredients, their chemical composition, nutritive value, potential anti-nutrients and toxins

EXAMPLES OF AREAS OF APPLICATION

Manipulation of fat concentration and fatty acid composition in food animals

Detection of and solutions to feeding management problems in the field

Appropriate labelling and use of feedstuffs

Sourcing and use of appropriate ingredients for feedstuffs or for direct feeding

Educating dietitians, health professionals and the general public on the composition of foods of animal origin in relation to their possible effects on human health

Advising feed manufacturers

Product labelling

Species differences in the composition of meat and milk, effects (or non-effects) of different farming systems eg organic

Advice on diet and feeding strategy to control eg stereotypic behaviour in horses, laboratory rodents, zoo animals, anxiety and aggression in dogs

Core Competency 3 - Social/Behaviour

Knowledge and understanding of food in a social or behavioural context, at all stages of the lifecourse.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

AN3a - Feeding behaviour of (nominated) animals in relation to nutrient requirements, digestion, health, natural behaviour and welfare

AN3b - Understanding human behaviour and perception and how these influence feed/food choice for animals

AN3c - Feeding behaviour of animal populations in relation to season, reproductive status and competition for resources

AN3d - Understanding trends in human health and nutrition and their impact on the consumption of food of animal origin

EXAMPLES OF AREAS OF APPLICATION

Formulation of rations and feeding strategies designed to meet the behavioural needs of intensively managed farm, companion, laboratory and zoo animals

Influencing owners/farmers/managers to make the right choices for animal maintenance, production performance health and welfare

Control of fertility in breeding females eg cattle, sheep, pigs, horses

Reduction in aggression eg pigs, poultry

Advice on diet and feeding in relation to for example managing obesity, feed sensitivity and animal disease eg feeding chocolate or vegetarian diets to dogs

Design of feeding systems eg for adult sows, lab. animals

Core Competency 4 - Health/Wellbeing

Understanding how to apply the scientific principles of nutrition for the promotion of health and wellbeing of individuals, groups and populations; recognising benefits and risks.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

AN4a - Physiological and pathological effects of deficiencies (and excess) of specific nutrients

AN4b - Disorders of digestion and metabolism in animals attributable to feeding and nutrition

AN4c - Impact of animal feeding and management on risks of animal diseases, zoonotic diseases and other health risks to humans (e.g. antibiotic resistance)

AN4d - Use of nutrient requirements to design practical feeding solutions for (nominated) animals to nutritionally support maintenance, production, health and performance.

EXAMPLES OF AREAS OF APPLICATION

Diagnosis and control of mineral deficiencies in grazing animals

Dietary management to minimise the risk of disorders such as acidosis, ketosis, laminitis

Pasture management and parasite control

Control of endemic infections, locomotor disorders

Advising diets for (nominated) animals based on their individual requirements.

Formulation and administration of supplements to pasture

Herd health planning

Leaflets for horse/pet owners

Outline of herd health programmes, feeding strategies to control eg 'leg weakness' in broiler chickens, post-weaning diarrhoea in piglets

Examples of recommended diets given to owners/ managers or farmers

Animal Nutritionists

Core Competency 5 – Professional Conduct Understanding of professional conduct and the Association for Nutrition's Code of Ethics with evidence of good character.

See Core Competency 5 section (p40).

Definition

Food Nutritionists will usually work in nutrition/food education/academia, as a nutrition/food researcher, for the food manufacturing industry (producing anything from baby foods to food supplements), the foodservice industry (from wholesalers to catering companies), food retailers (major supermarkets or pharmacy chains), public relations companies or trade/ industry organisations. Food nutritionists usually look at the science, ingredients, policy, legislation and regulations involved in the consumption or marketing of a food item. Their roles will vary between nutrition training or education, customer service, health promotion and assessing, setting, implementing and communicating nutritional standards and information for foods in commercial and food service settings, marketing, product development, regulatory support and research/science. Their role may also include community development/health improvement as well as commissioning of services.

Registered Nutritionists specialising in Food will have the option to use the suffix (Food), (Food Industry) or (Industry) after their title RNutr.

Core Competency 1 - Science

Knowledge and understanding of the scientific basis of nutrition. Understanding nutritional requirements from the molecular through to the population level – for either human or animal systems.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

- FN1a Scientific basis and food sources of nutrients
- FN1b Digestion and absorption
- FN1c Nutrition in health & disease
- FN1d Dietary Reference Values
- FN1e Food & nutrition policy
- FN1f The ability to undertake appropriate assessment techniques
- FN1g The ability to analyse and evaluate food intake records, recipes and diets manually and using appropriate computer programmes

EXAMPLES OF AREAS OF APPLICATION

Experience of/utilisation of food labels, GDAs, front of pack signposting

Interpretation of national or international dietary guidelines

Application of dietary or nutritional guidelines to product development or marketing or other consumer communications

Contributions to scientific committees eg NICE, SACN

Responding to media and consumer enquiries

Development of nutrition websites

Facilitation of scientific meeting

Core Competency 2 - Food Chain

Knowledge and understanding of the food chain and its impact on food choice. Integrating the food supply with dietary intake.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

- FN2a Food production and supply from farm to fork
- FN2b Food manufacturing processes
- FN2c Quality control systems, microbiological food safety issues in production
- FN2d Sustainability and food procurement
- FN2e Consumer food choice
- FN2f Impact of food supply (processing, preservation, cooking etc) on nutritional quality and chemical composition
- FN2g Food sources of nutrients (and other constituents of food)
- FN2h Understanding of available nutrients in foods
- FN2i Impact of new developments in food science on food choice

EXAMPLES OF AREAS OF APPLICATION

Tackling socioeconomic nutritional disparities and influences on food choice

Experience of/utilisation of food labels, GDAs, front of pack signposting

Clear appreciation of the potential or actual knock-on effect labelling may have on dietary intake eg product reformulation, labelling strategies, marketing campaigns, store tours

Contributions to consultations eg DH, FSA, FAO or other similar consultation

Translating food information into nutrient intake

Product quality surveillance, including food labelling

Adaptation of food manufacturing systems to improve nutritional value

Development of food safety or food hygiene systems or guidance

Formulation sustainability or environmental awareness plans relating to food products

Functional foods and health

Dietary supplements and fortified foods

Core Competency 3 – Social/Behaviour

Knowledge and understanding of food in a social or behavioural context, at all stages of the lifecourse.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

FN3a - Nutrient requirements across the lifespan in a social and behavioural context

FN3b - Specific food processing/manufacturing needs associated with specific population groups eg infants, vegetarians etc

FN3c - Food preparation requirements for different population groups

FN3d - Ability to communicate effectively with individuals and groups using a range of methods and media to enable them to make informed choices about nutrition

FN3e - Principles of behavioural sciences which are relevant to the practice of a food nutritionist

FN3f - Psychological, social and cultural factors influencing food choice

EXAMPLES OF AREAS OF APPLICATION

Dietary or nutritional advice regarding requirements of different sub-population groups across the lifecycle

Clear appreciation of social and behavioural barriers to implementation of suggested dietary changes

Clear appreciation of the socio-cultural meanings of food in a variety of settings including both low and high income communities and populations

Provision of advice on how to modify food/nutrient intake to take account of the population's age, gender, background

Core Competency 4 – Health/Wellbeing

Understanding how to apply the scientific principles of nutrition for the promotion of health and wellbeing of individuals, groups and populations; recognising benefits and risks.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

FN4a - Dietary assessment and communication of dietary advice

FN4b - Food service for specific health issues

FN4c - Processing issues linked to food for people with specific health needs.

FN4d - Interpreting nutritional assessment information in relation to an individual's or group's goals and preferences and how to modify nutritional requirements to take account of occupation, lifestyle, age group, gender and physiological stage of life of the individual or group

FN4e - Ability to use markers of nutritional status and diet related health to identify health needs of specified individuals, groups, and communities

EXAMPLES OF AREAS OF APPLICATION

Use of dietary assessments/dietary recommendations to give practical advice to individuals or groups

Application of knowledge to healthy catering (FSA/DoH), menu development, healthy product development etc

Development and production of specialist dietary products eg balanced energy-protein supplements

Introduction of national programmes eg universal salt iodisation

Consumer communications, product information, marketing etc.

Running a nut-free production line in a manufacturing plant

Translation of nutritional guidelines into menus/meals

Product reformulation

Food Nutritionists

Core Competency 5 – Professional Conduct Understanding of professional conduct and the Association for Nutrition's Standards of Ethics, Conduct and Performance

See Core Competency 5 section (p40).

Definition

A Nutrition Scientist investigates how the metabolic and physiological demands of cells, tissues, organs and the whole body are met from the diet, de novo synthesis and from body reserves. The nutrition scientist may use expertise from the fields of molecular biology, biochemistry, physiology and genetics or other underpinning scientific knowledge. They aim to understand the factors that determine requirements for energy and specific nutrients, the sequence of steps through which ingested substances are digested and change from one form to another in the body, how food related chemicals can cause or prevent disease or may affect risk factors. Their work may contribute to understanding of pathological or healthy processes in humans and other animals. Nutrition Scientists will typically work in a research role in academia/food industry/research institutes etc.

Registered Nutritionists specialising in Nutrition Science will have the option to use the suffix (Nutrition Science) after their title RNutr.

Core Competency 1 - Science

Knowledge and understanding of the scientific basis of nutrition. Understanding nutritional requirements from the molecular through to the population level – for either human or animal systems.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

- NS1a Impact of diet on the maintenance of health and the aetiology of diet-related diseases
- NS1b Processes of healthy digestion and disorders of digestion in humans or animals
- NS1c Factors influencing cellular integrity
- NS1d Factors affecting energy metabolism and energy expenditure
- NS1e Factors affecting the availability of micro- and macro-nutrients and their requirements in the body
- NS1f Understanding of other bioactive compounds
- NS1g Factors affecting the nutritional significance of the minerals and trace elements, their absorption, storage and excretion
- NS1h Genetics, epigenetics, gene-nutrient interactions and foetal programming

EXAMPLES OF AREAS OF APPLICATION

Role of saturated fat in the aetiology of CVD

Diet and cancer

Protective role of dietary bioactive compounds eg polyphenols

Diet formulation in human health and disease

Diet formulation for animals

Investigation of the mechanistic basis of food components that appear to have a statistical association with protection against diseases such as CVD and cancers

Aetiology of obesity and cachexia

Diet formulation for farm animals

Development of nutritional strategies in areas of famine or chronic malnutrition

Prevention of mineral deficiencies and excesses in humans and/or animals

Investigation of the mechanistic basis of action of nutrients in the body

Nutrition in pregnancy

Dietary management of genetic disorders

Core Competency 2 - Food Chain

Knowledge and understanding of the food chain and its impact on food choice. Integrating the food supply with dietary intake.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

NS2a - Understanding of available nutrients in foods and feeds

NS2b - Sustainability and global food security

NS2c - Impact of new developments in food science on food choice

NS2d - Biological mechanisms underpinning risk assessment and epidemiology

EXAMPLES OF AREAS OF APPLICATION

Advice to legislators, NGOs etc

Functional foods and health

Impact of low fat highly processed foods on health

Conducting and evaluating population studies

Impact of processing change (benefits vs risks)

Novel foods (benefits vs risks)

Core Competency 3 - Social/Behaviour

Knowledge and understanding of food in a social or behavioural context, at all stages of the lifecourse.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

NS3a - Variations in nutrient requirement and availability of nutrients from birth to senescence

NS3b - Psychological and societal factors that affect appetite and diet selection in humans

EXAMPLES OF AREAS OF APPLICATION

Public health aspects of the impact of diet availability and dietary habits on health and development

Management of obesity and cachexia in humans

Research into mechanistic aspects of life course nutrition

Core Competency 4 - Health/Wellbeing

Understanding how to apply the scientific principles of nutrition for the promotion of health and wellbeing of individuals, groups and populations; recognising benefits and risks.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

NS4a - Underpinning science and practicalities of strategies for improving nutrition at the population level.

NS4b - Ability to analyse, evaluate and interpret scientific evidence

EXAMPLES OF AREAS OF APPLICATION

Communicating nutrition science to non-specialist groups and the general population

Communicating best practice in nutrition, in a responsible manner, through the media

Effective communication of research findings

Acknowledging the limitations of the scientific principles of nutrition

Using research findings to influence nutrition in practice

Nutrition Scientists

Core Competency 5 – Professional Conduct Understanding of professional conduct and the Association for Nutrition's Standards of Ethics, Conduct and Performance

See Core Competency 5 section (p40).

Definition

Public Health Nutritionists develop, implement and evaluate nutrition policies and programmes, generating the evidence base and applying scientific knowledge to ensure understanding of the impact of food and diet on health and well being of people and communities, and improving the diet, nutrition and health of people and communities. Roles can include health improvement; addressing inequalities in nutrition and health; nutrition advocacy; developing, commissioning and implementing policies and programmes; monitoring, evaluation and assessment of diet in groups/communities; education and generating research evidence linking food/nutrients and health.

Public Health nutritionists will generally work in research, government, NHS, non-governmental organisations, health authority/local authority settings etc or be self employed.

Registered Nutritionists specialising in Public Health Nutrition will have the option to use the suffix (Public Health) after their title RNutr.

Core Competency 1 - Science

Knowledge and understanding of the scientific basis of nutrition. Understanding nutritional requirements from the molecular through to the population level – for either human or animal systems.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

- PH1a The processes of digestion and absorption, and key functions of nutrients in the body
- PH1b The nature of metabolic demand for nutrients and nutritional requirements
- PH1c The consequences and identification of nutrient deficiencies
- PH1d Dietary reference values and safe upper limits
- PH1e Role of different sectors in society in promoting nutritional health
- PH1f Nutritional demands of physical activity

EXAMPLES OF AREAS OF APPLICATION

Use research to develop evidence base for practice, eg. drafting background papers to support nutrition policy

Undertake modelling exercises to determine impact of changes in food composition or consumption eg due to reformulation

Develop strategy and policy to provide advice to a range of population groups/settings on nutrient and food based standards

Develop/implement/monitor and evaluate nutritional interventions to maintain or improve health or prevent disease

Core Competency 2 - Food Chain

Knowledge and understanding of the food chain and its impact on food choice. Integrating the food supply with dietary intake.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

PH2a - Impact of food supply (processing, preservation, cooking etc) on nutritional quality and chemical composition

PH2b - Food sources of nutrients and other constituents of food

PH2c - Dietary assessment and use of anthropometry and biomarkers

PH2d - Sustainability of the food supply and global food security, considering environmental, ethical and biodiversity issues

EXAMPLES OF AREAS OF APPLICATION

Translate food information to nutrients

Measure, describe and interpret patterns of food/nutrient intake or markers of nutrition eg stunting, wasting

Research in related knowledge areas

Formulate ideas and opinions about public health nutrition related to the food supply

Analyse data eg national food surveys to determine and understand implications of what the population eats

Advise on diet at individual and population level according to setting and circumstances

Use research evidence in policy development and provision of advice to organisations in order to support healthier dietary advice and behaviour

Develop local strategies to support national public health nutrition policies

Core Competency 3 – Social/Behaviour Knowledge and understanding of food in a social or behavioural context, at all stages of the lifecourse.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

- PH3a Food, nutrition and health policy development & delivery
- PH3b Theories of nutrition education and behaviour change
- PH3c Psychological, social, cultural and economic factors influencing food choice
- PH3d Sociology and politics of institutions and other stakeholders in national and global food supply
- PH3e Sustainability and equity in public health nutrition programmes
- PH3f Principles of controlling non-communicable diseases
- PH3g Knowledge of behaviour change, in particular changes in diet and physical activity

EXAMPLES OF AREAS OF APPLICATION

Undertake research in behavioural/social aspects of nutrition in different population groups – either local, national or international level and for both low and high income communities

Synthesise evidence relating to social and behavioural context of nutrition

Working with different sections of the population to advise and educate on healthy diets/nutrition

Develop and deliver behaviour change training targeted at needs of audience

Advise on how to modify food/nutrient intake to take account of the population's age, gender, background

Core Competency 4 - Health/Wellbeing

Understanding how to apply the scientific principles of nutrition for the promotion of health and wellbeing of individuals, groups and populations; recognising benefits and risks.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

PH4a - Nutrition in health and disease in populations

PH4b - Role of diet, foods, nutrients, physical activity and sedentary behaviour in causation and prevention of disease eg obesity, cardiovascular disease, cancers, conditions related to undernutrition

PH4c - Appropriate research methods and recognition of strengths and weaknesses of research methods eg epidemiology and statistics, awareness of the limitations of the science base for public health nutrition

EXAMPLES OF AREAS OF APPLICATION

Analyse diet-disease relationships through research or literature review

Develop nutrition related interventions eg weight management referral schemes; preventions of undernutrition in infants, micronutrient supplementation programmes

Delivering interventions/ campaigns to make the population aware of the need for healthier eating eg through food co-ops; school fruit scheme; breakfast clubs; lesson planning, growth monitoring

Propose a solution to a nutrition-related problem appropriate for specific individuals or groups to prevent ill health or to improve health eg zinc in management of diarrhoea, folate supplementation

Support nutritional policy development and implementation

Contribute to scientific and/or policy and strategy committees (eg SACN, NICE)

Undertake effective stakeholder engagement

Identify gaps in evidence base and identify and develop research requirements to meet these

Ability to undertake research safely, effectively, ethically

Public Health Nutritionists

Core Competency 5 – Professional Conduct Understanding of professional conduct and the Association for Nutrition's Standards of Ethics, Conduct and Performance

See Core Competency 5 section (p40).

Definition

Sports and Exercise Nutritionists develop, implement and evaluate nutritional strategies to optimise performance in sport and exercise. They determine the energy, fluid and nutrient demands of sport and exercise and provide tailored dietary advice to individuals and groups, ranging from recreational athletes, enthusiastic amateurs to elite professional athletes. They may also work for and in the sports nutrition industry eg producing products for athletes of all ability levels, or may work in education, be academics or researchers.

Registered Nutritionists specialising in Sports and/or Exercise Nutrition will have the option to use the suffix (Sports), (Exercise) or (Sports/Exercise) after their title RNutr.

Core Competency 1 - Science

Knowledge and understanding of the scientific basis of nutrition. Understanding nutritional requirements from the molecular through to the population level – for either human or animal systems.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

- SE1a Principles of training and components of fitness, the physiological demands of exercise and sporting performance and appreciate the implications of these on the nutritional needs of an athlete
- SE1b Demands of physical activity, exercise and sport participation on metabolism and nutrient and fluid needs, how this affects energy and nutrition requirements, and how they vary from current DRVs and recommendations eg salt intake, 5 a day
- SE1c Recognise the evidence base for the IOC consensus statements
- SE1d Role of hydration status in performance, including how assessment of hydration status is carried out
- SE1e Awareness and consideration of the role of nutrition in the prevention and recovery from illness and injury
- SE1f Awareness and impact of travel, environment etc on nutritional demands and ability of athletes to achieve nutritional goals

EXAMPLES OF AREAS OF APPLICATION

Using research to develop evidence bases for practise

Identifying gaps in the evidence base in order to identify and develop research programmes

Developing strategy and policy on food and nutrient based standards to provide advice to a range of athletes and for a range of sports and physical activity

Provide evidence based guidance on the safe and effective use of dietary or nutritional supplements

Core Competency 2 - Food Chain

Knowledge and understanding of the food chain and its impact on food choice. Integrating the food supply with dietary intake.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

SE2a - Ability to measure and estimate the energy and nutritional requirements for sport, exercise and PA and to monitor nutritional status

SE2b - Knowledge of food sources of energy and other nutrients

SE2c - The impact of the food supply in terms of processing, cooking etc on nutritional quality and chemical composition

EXAMPLES OF AREAS OF APPLICATION

Advising on diet at individual and population level according to the requirements of the sport, exercise or physical activity

Translating food information to nutrients

Developing strategies to support nutrition policies in the area of physical activity and sports

Core Competency 3 – Social/Behaviour

Knowledge and understanding of food in a social or behavioural context, at all stages of the lifecourse.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

- SE3a Understanding of the Sporting World structure, hierarchies, roles within, funding, rules etc
- SE3b Awareness and consideration of ambitions, values, beliefs, motivations, training and performance pressures of athletes
- SE3c Nutritional needs of special populations eg young athletes, female, veteran, physical and mental disabilities
- SE3d Ability to apply understanding of the lifestyle of sportspeople and the influence of income, shopping and cooking skills on achieving dietary goals, including the specific requirements of various population groups eg juniors, veterans, women, paralympians, vegetarians
- SE3e Ability to review role of ergogenic aids and nutritional supplements and relationship to antidoping legislation
- SE3f International and domestic support nutrition policies and procedures specifically with regard to WADA doping rules and regulations
- SE3g Current legal restrictions on supplement/drug use and the necessity of working in an ethical manner at all times. Efficacy of supplementation and knowledge of regulatory bodies

EXAMPLES OF AREAS OF APPLICATION

Research into behavioural/social aspects of nutrition in different groups as it relates to sports and PA

Working with different sections of the population and different sports

Ability to suggest how to modify food/nutrient intake to take account of the population's age, gender, sport etc

Core Competency 4 - Health/Wellbeing

Understanding how to apply the scientific principles of nutrition for the promotion of health and wellbeing of individuals, groups and populations; recognising benefits and risks.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

SE4a - Knowledge of metabolism, nutrient and fluid needs during participation in physical activity, exercise and sport

SE4b - Role of diet in achieving optimal performance

EXAMPLES OF AREAS OF APPLICATION

Translation of metabolism, nutrient and fluid needs during participation in physical activity, exercise and sport into food and drink based guidelines/sports nutrition education programmes

Devising dietary strategies to support changes in body mass and composition

Developing and implementing nutrition and hydration policies/practices for clubs and governing bodies and working with caterers/food providers to ensure appropriate foods/meals are available

Producing food/drink based education materials for individuals/teams

Assessment of dietary intake and counselling of individuals and teams to achieve an optimum diet for performance through meal adaption/menu modification and recognition of timing of consumption eg build up to/pre/during/post training/competition

Sports and Exercise Nutritionists

Core Competency 5 – Professional Conduct Understanding of professional conduct and the Association for Nutrition's Standards of Ethics. Conduct and Performance

See Core Competency 5 section (p40).

Definition

A Registered Nutritionist (Healthcare- Medical) will be registered with the General Medical Council (GMC) and holds a license to practise, will have completed their Foundation Year 2 (FY2) and will have substantial additional relevant professional experience postgraduate education and training in nutrition sufficient to meet the competence requirements for entry to UK Voluntary Register of Nutritionists (UKVRN) as a Registered Nutritionist (Healthcare-Medical). They will be a GMC registered and licensed medical practitioner who uses their nutrition knowledge and experience as a routine part of their job, usually within a clinical environment, to advise on individual and population nutritional needs and management.

A Registered Nutritionist (Healthcare-medical) must hold continuing registration with the General Medical Council (GMC) <u>and</u> a licence to practise

A Registered Nutritionist (Healthcare-Medical) will be required to submit a Certificate of Good Standing (or equivalent) from their statutory regulator upon application.

Registered Nutritionists specialising in Healthcare-Medical Nutrition will have the option to use the suffix (Healthcare-Medical) after their title RNutr.

Core Competency 1 - Science

Knowledge and understanding of the scientific basis of nutrition. Understanding nutritional requirements from the molecular through to the population level – for either human or animal systems.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

- HC1a Anatomy and physiology of normal ingestion, digestion, absorption and utilisation of foods, water, electrolytes, energy and nutrients
- HC1b Characterisation of nutritional state body composition, functional assessment, macro and micronutrient status, physical activity, diet
- HC1c Scientific basis for the demands for energy, macronutrients and micronutrients for normal growth, development and ageing
- HC1d Dietary reference values; derivation and application
- HC1e- Nutritional causes and consequences of weight gain, overweight, obesity and metabolic syndrome
- HC1f Impact of illness on nutritional demands metabolic, physical activity; reductive adaptation and refeeding syndrome
- HC1g Role of alcohol energy, toxin, social
- HC1h Non-nutrient components of food e.g. caffeine, phytochemicals
- HC1i Nutritional demands of physical activity
- HC1j Changing nutritional (physiological) requirements through the lifespan including pregnant and lactating mothers, infants and through to the end of life

EXAMPLES OF AREAS OF APPLICATION

Understanding of anatomy and physiology assisting understanding disruption to homeostasis of nutrition in diseased and surgically altered states

How nutrients are used by, and requirements of, the body: consequences of deficiency and assessment of nutritional status

Macro and micro nutrient metabolism in health and disease

Relationship between DRVs and RDAs used on vitamin supplements

Common biochemical pathways involving nutrients e.g. Krebs cycle, role of vitamins and micro-nutrients as co-enzymes

Energy metabolism and physiological states including starvation and hyper-metabolic/ catabolic states.

Inflammation, cytokines, eicosanoids and related processes in relation to nutrition

Non-nutrient components of foods and drinks that affect diet and health, e.g. alcohol and fibre

Develop/implement/monitor and evaluate nutritional interventions to maintain or improve health				
Calculate and plot BMI, and use paediatric growth charts when appropriate				

Core Competency 2 - Food Chain

Knowledge and understanding of the food chain and its impact on food choice. Integrating the food supply with dietary intake.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

- HC2a Awareness of global food commodities (staple foods, main sources of key nutrients, novel foods etc.)
- HC2b Understanding nutritional content of common foodstuffs
- HC2c Bioavailability of nutrients in food including the role of preparation and cooking
- HC2d Effect on nutritional composition foods and diets, and on nutrient bioavailability, of:
 - methods of food production, preparation, preservation, fortification, processing and distribution and format
 - sources of food supply
 - methods of cooking and preservation
- HC2e Appropriate and inappropriate uses of food/dietary/nutritional supplements
- HC2f Understanding of food labelling
- HC2g Ability to interpret nutrition and health claims for foods and drinks

EXAMPLES OF AREAS OF APPLICATION

Diets for health and wellbeing - Foods and Food Groups, Dietary Patterns eg DASH (Dietary Approach to Stop Hypertension), 'Mediterranean', Special/ Adapted Diets, Dietary supplementation etc.

Ethnic/cultural/religious food choices

Diets for weight loss management

Novel and/or functional foods

Macro-nutrient supplements and food sources of nutrients Processed foods

Understanding impact of food reformulation for patients

Core Competency 3 - Social/Behaviour

Knowledge and understanding of food in a social or behavioural context, at all stages of the lifecourse.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

HC3a - Public health, cultural, social, religious and ethnic considerations including disease and/or obesity- specific considerations affecting appetite, diet and nutritional status.

HC3b - Role of the healthcare professional in using social and behavioural interventions at population and individual levels.

HC3c - Social aspects in pregnancy and infant feeding

HC3d - Understand the importance of social interaction aspects of eating and drinking in everyday life

HC3e - Impact of poverty/socio-economic status on nutritional status

HC3f - Understanding basic mental health and illness paradigms including addictive behaviour patterns e.g. alcohol consumption, extreme dietary restrictions, disordered eating and eating disorders.

HC3g - Understanding the stigma associated with extremes of physical appearance associated with nutrition: obesity and cachexia

HC3h - Impact of food and drink advertising on consumption

HC3i - Food, nutrition and health policy development & delivery

HC3j - Theories of nutrition education and behaviour change

HC3k - The role of healthcare professionals in identifying and influencing nutritional choices in health and disease

EXAMPLES OF AREAS OF APPLICATION

Public health and individual aspects of the impact of food and drink availability and dietary habits on health and development

Advise on how to modify food/nutrient intake to take account of age, gender, socio-economic status and ethnicity/cultural background

Advice on food choice during shopping trips/internet visits to supermarkets

Management of obesity and cachexia in humans

Examples of special needs during the life course such as pregnancy, breast feeding, ageing and end of life care

Food and nutrition policies within healthcare professional institution/place of work and nationally

Core Competency 4 - Health/Wellbeing

Understanding how to apply the scientific principles of nutrition for the promotion of health and wellbeing of individuals, groups and populations; recognising benefits and risks.

EXAMPLES OF AREAS OF KNOWLEDGE & SKILLS REQUIRED

HC4a - Know how to undertake nutritional status assessment -

- History and physical examination
- Laboratory
- · Body composition
- · Deficiencies and excess

HC4b - Know how to use validated tools for screening for malnutrition e.g. 'MUST' (Malnutrition Universal Screening Tool)

HC4c - Understand advantages and limitations of laboratory tests as markers of nutritional status.

HC4d - Changes in body composition relating to acute and chronic ill health including

- Fluid and hydration (including over-hydration), lean mass, fat mass
- Functional nutritional state
- Reductive adaptation, refeeding syndrome
- · Ageing, sarcopenia, cachexia

HC4e - Calculation of altered protein, macro- and micro-nutrient, and energy needs in illness

HC4f - Where relevant, understanding of nutritional demands in infancy, childhood, adolescence, adult, pregnancy and ageing.

HC4g - Recognise under and over nutrition - malnutrition including obese patients and those critically ill and be able to provide appropriate weight management advice

HC4h - Undernutrition and nutrition support (parenteral and enteral) (see examples)

HC4i - Disease specific nutrition including under- and over- nutrition related to specific disease states (see examples)

HC4j - Knowledge of common micronutrient deficiencies e.g. iron, B12, folate, thiamine, selenium, vitamin D and magnesium deficiency; and excess e.g. sodium

HC4k - Appropriate uses of oral, enteral and parenteral methods of nutritional support, confirming safe placement of device

HC4I - Impact of gastro-intestinal surgical intervention of the gastro-intestinal tract; peri-operative nutrition, enhanced recovery and long term consequences thereafter

HC4m - Knowledge of and methods of managing re-feeding syndrome

HC4n - Awareness of eating disorders and how to refer for specialist help

HC4o – Awareness and management of food allergies and intolerances

HC4p - Diagnosis and management of intestinal failure, referring to appropriate specialities including regional or national intestinal failure centres for advice/on-going care

HC4q - Ability to analyse, evaluate and interpret scientific evidence

HC4r - Nutritional causes, consequences and management of chronic conditions (e.g. cardio-vascular disease, cancer, diabetes, obesity, hypertension, dyslipidaemia) including inter-individual differences in dietary response in conditions such as those listed below.

HC4s - Nutritional management of acute illness

EXAMPLES OF AREAS OF APPLICATION

Management of diseases (as appropriate to the specific healthcare scope of practice)

- Cardiovascular
- Diabetes
- Obesity
- Hypertension
- Dyslipidaemia
- Gastrointestinal, pancreatic and hepatobiliary
- Critical Illness and Sepsis
- Lipids, endocrine and diabetes mellitus (including physical activity)
- Renal (e.g. low potassium and high protein diets, renal stone diets)
- Pulmonary
- Bone/musculoskeletal including vitamin D, osteoporosis and prevention of steroid induced bone density compromise
- Cancer, including peri-operative and surrounding chemo- and radio-therapy
- Haematological/anaemia
- Immunological
- Neurological
- Surgical and Transplantation
- Genetic and metabolic
- Paediatric
- Obstetric
- Alcohol and drugs
- Psychiatric: eating disorders (MARSIPAN), depression, mania
- Coeliac disease
- Pancreatic exocrine insufficiency
- low FODMAP diet for IBS
- low residue diet
- no-added salt diet
- palliative medicine
- medication and food
- medication and nutrients
- Examples of undernutrition and nutrition support (parenteral and enteral) include
 - hydration support including in enteral tube feeding patients
 - knowledge of intravenous fluid contents e.g. sodium and potassium content
 - interpretation of plasma electrolyte concentrations in health and chronic and acute illness
 - Management of electrolyte balance
 - Management of acute and chronic severe and moderate malnutrition;
 - Resuscitate repair replete
 - Appropriate intravenous line placement and care

Influence of medication on enteral and parenteral feeding

Influence of acute illness/sepsis upon body composition, e.g. fluid shift producing oedema and ascites, muscle wasting of acute illness, disuse atrophy and sarcopenia of ageing

Understanding routes of delivering feed e.g. enteral tube feeding NG, PEG, post-pyloric, as well as basic

knowledge regarding parenteral nutrition

Communicating nutrition science to patients, non-specialist groups and the general population

Effective communication of research findings

Acknowledging the limitations of the scientific principles of nutrition

Using research findings to influence nutrition in practice

Use growth charts and be able to calculate BMI, when required.

Core Competency 5 – Professional Conduct Understanding of professional conduct and the Association for Nutrition's Standards of Ethics, Conduct and Performance

See Core Competency 5 section (p40).

PC14-16 below are additional core competency 5 requirements for those applying for the specialist area of competence of Healthcare – Medical.

AREAS OF KNOWLEDGE & SKILLS REQUIRED	EXAMPLES OF AREAS OF APPLICATION
PC14 - Adherence to core regulator's ethical guidance framework	Good Medical Practice (GMC)
PC15 – Understanding the principles of medico-legal ethics in dealing with complex nutritional and hydration care especially when involved in end of life care and withholding or withdrawal of artificial feeding PC16 - Knowledge of referral pathways and other health care professionals with expertise in nutrition	

Core Competency 5

Professional Conduct

Understanding of professional conduct and the Association for Nutrition's Standards of Ethics, Conduct and Performance with evidence of good character and health.

Strict adherence to the AfN's Standards of Ethics, Conduct and Performance and the level of professional conduct and behaviour expected from Registered Nutritionists applies to all, regardless of the specialist area of nutrition. Consequently, the requirements under Core Competency 5 (as detailed below) must be demonstrated by all applicants.

AREAS OF KNOWLEDGE & SKILLS REQUIRED	EXAMPLES OF AREAS OF APPLICATION
PC1 - Awareness of the necessity of the ethical requirements of being a UKVRN Registered Associate Nutritionist/Registered Nutritionist. Full knowledge of and adherence to all aspects of the AfN Standards of Ethics, Conduct and Performance PC2 - Awareness of and adherence to responsibilities and accountability in relation to the relevant current international, European and national legislation, national guidelines and local policies and protocols	Awareness of the necessity of practising within legal and ethical boundaries of the profession and within limits of own area of expertise Ensuring appropriate level of mentoring appropriate to practice as and when required Understanding of and compliance with the obligation to maintain fitness to practice Awareness of the need for independent ethical review of research activity
PC3 - Regular development and improvement of professional practice and competence through continuing professional development PC4 - Continual reflection on and evaluation of own practice against best practice standards, guidelines and protocols to improve practice in the best interest of clients, the public and the profession PC5 - Continual assessment and management of risk in own practice	Maintenance of a personal development portfolio which identifies learning and development needs and the steps taken to meet these needs Undertaking appropriate CPD and training courses
PC6 - Awareness and understanding of research and other developments in the relevant evidence base(s) within own specialty PC7 - Critical appraisal of the outcomes of relevant research and evaluations and application to improve own practice	Changing practice as needed to take account of new research and developments in the field

AREAS OF KNOWLEDGE & SKILLS REQUIRED	EXAMPLES OF AREAS OF APPLICATION
PC8 - Awareness of the role of audit and review in quality management, including quality control, quality assurance and the use of appropriate outcome measures	Auditing own practice against best practice standards, guidelines and protocols
PC9 - Understanding of and commitment to equality, diversity and rights, and to practice in a non-discriminatory manner PC10 - Understanding of and commitment to necessity of obtaining informed consent whenever required	Interpreting nutritional assessment information in relation to the client's goals and preferences and knowledge of how to modify nutritional requirements for an individual to take account of occupation, lifestyle, age group, gender and physiological stage of life etc Planning nutritional interventions and programmes in partnership with the client to enable them to reach goals that are appropriate to, and take account of, individual preferences, religious and cultural practices or proscriptions
PC11 - Ability to establish appropriate professional relationships and, where appropriate, work effectively as part of a team PC12 - Ability to work, where appropriate, in partnership with other professionals, support staff, individuals, groups, colleagues, commercial organisations, the media and stakeholders. PC13 - Ability to communicate effectively with individuals and groups using a range of methods and media to enable them to make informed choices about nutrition	Presentation of information clearly and succinctly in oral and written formats tailored to message and audience Recording of the agreed plan using a format, language and terms that are clear and likely to be understandable to the client and any other individuals, professionals or groups that may need to access this information

Evidence

Nutrition is an extremely varied profession and registrants are from a wide range of backgrounds. For this reason it is difficult to provide specific examples of evidence that can be provided by individuals to show how their level of professional knowledge, skills and experience meets each of the required core competencies. However, the following table provides an indication (not an exhaustive list) of the types of evidence that can be used to support an application for registration.

Examples of acceptable types of evidence

- Current job description
- Copy of annual review/forward work plan
- Scientific papers in peer-reviewed journals
- Internal reports/copies of reports in public domain
- Technical reports provided
- Product development reports
- Lecture/presentation notes/slides (either given or attended)
- Lesson plans/lecture outlines (either given or attended)
- Educational material/training aids prepared/produced/developed/delivered
- · Marketing materials produced
- Copy of abstract/reference or, where possible, research output or copy of research bid
- Summary of client reports
- Published list of editorial board membership for relevant journal
- Front cover and contents page(s) of authored/edited book
- Published webpages (hard copy or links) with evidence of authorship/input/contribution eg email submissions, testimonials etc
- Certificate of attendance at relevant conference, with conference programme/content details, relevant conference papers

- Input into consultation documents
- Involvement with research process ie copy of final report
- Grant proposal writing (copy of final proposal)
- Strategy or policy development reports (including evidence base)
- Advising on and/or delivering nutrition/dietary policy issues
- Participation in policy development groups
- Involvement with programme committees, contribution to government, scientific committee, ad hoc groups or other working and guidance development groups (reports/minutes containing name/contribution)
- Conduct and analysis of research (publication/report)
- Membership of advisory bodies
- Commissioning of research
- Reports to NGOs or other stakeholders
- Organising and contributing to stakeholder events
- Responding to media enquiries
- Testimonials

Applicants for Registered Nutritionist status will be required to provide a portfolio of evidence demonstrating how they meet the required level of knowledge, understanding and practical skills required under each of the five core competencies for their chosen area(s) of specialism. All applicants must be able to provide at least one evidence example under each of the core competencies 1-4. Evidence must also be provided to address all point (PC1-13) listed under core competency five (this can be done through a combination of evidence examples and the Supporting Statement).