



EUROPEAN
FEDERATION OF
THE ASSOCIATIONS
OF DIETITIANS

EFAD Academic Standards – 2018 revision

Adopted by EFAD's General Meeting September 2018

	Contents	Page
	Introduction	3
	Academic Curriculum	3
3.1	Overview	
3.2	Domains	4
3.2.1	Domain 1: Healthcare professionalism	
	o 1.1 Professionalism in Dietetics	
3.2.2	Domain 2: Knowledge base of dietetics	4
	o 2.1 Nutrition	
	o 2.2 Food Science and Food Management	
	o 2.3 Biomedical science	
	o 2.4 Social Science	
3.2.3	Domain 3: Dietetic process and reasoning skills	8
	o 3.1 Dietetic Therapy	
	o 3.2 Public Health Nutrition	
3.2.4	Domain 4: Evidence base in dietetics	10
	o 4.1 Epidemiology	
	o 4.2 Evidence Based Practice	
	o 4.3 Research	
3.2.5	Domain 5: Autonomy, accountability and quality of dietetic practice	10
	o 5.1 Self-management	
	o 5.2 Management skills	
	o 5.3 Leadership	
3.2.6	Domain 6: Communication, relationships and partnership skills in dietetics	11
	o 6.1 Communication skills	
	o 6.2 Relationships & partnership working	
3.3	Programme management	12
3.3.1	o Policies and Procedures	
3.3.2	o Curriculum Delivery	13
3.3.3	o Assessment	13
	Appendix 1	14
	References and glossary	19

Introduction

Over the past 12 years EFAD and the Education and Lifelong Learning Committee (ELLLC) has worked with colleagues from Higher Education to develop a series of policy documents to support the education of dietitians across Europe. In 2016 ELLLC published the Revised Dietetic Competences and the six domains of dietetic competency in Europe. ELLLC will update the European Practice Placement Standards for Dietetics and the European Pedagogic Standards for Practice Placement documents in 2018 and 2019, as part of their workplan.

The European Academic and Practitioner Standards for Dietetics were first adopted by EFAD in 2005 and first reviewed in 2009. In 2016 EFAD created a new European Specialist Dietetic Network (ESDN) for Higher Education, comprising representatives of Higher Education Institutes (HEI's), whose mission is to enhance and harmonise the quality of education across Europe. The first task undertaken by the ESDN Education was to revise the Academic Standards for the education and training of dietitians across Europe. A consultation of EFAD members and Higher Education specialists, including feedback from workshops at the 2017 EFAD conference, has resulted in the 2018 version. EFAD and the ELLLC are very grateful for the support and partnership offered by the ESDN Education in undertaking this revision.

The major changes to the Academic Standards are

- The key areas of taught curriculum have been presented as Learning Outcomes, which are readily transferrable modules and course documentation.
- Appendix 1 has been added to help focus the standards for specialist areas (e.g. food service).

Academic Curriculum

This document outlines minimum criteria for the effective delivery of a training programme for dietitians in Europe.

3.1 Overview

The structure of the curriculum guidance is structured to reflect the six domains of competency that make up a European Dietitian.

Healthcare professionalism
Knowledge base of dietetics
Dietetic process and reasoning skills
Evidence base in dietetics
Autonomy, accountability and quality in dietetic practice
Communication, relationships and partnerships skills in dietetics

Please note:

- ✓ the cited learning outcomes are indicative of areas considered necessary for the education of an undergraduate European dietitian
- ✓ Educators may choose to include additional learning outcomes
- ✓ A 'learning outcome' may be cited more than once, if it falls within the scope of different domains, e.g. behaviour modification, record keeping and maintaining client confidentiality.

3.2.1 Domain 1 Healthcare professionalism

	Topic	Learning outcome
1.1	Professionalism	<i>Is able to</i>
1.11	Professionalism in Dietetics	<ul style="list-style-type: none"> ○ Identify the complexity of the profession of dietetics and can explain the limitations of our own personal practice as a dietitian ○ build positive relationships with colleagues in the multi-disciplinary team and to be an integral part of this team ○ Identify the legal and ethical boundaries of practice ○ Act with integrity and honesty in all aspects of behaviour and professional practice ○ Practice in accordance with professional regulations, standards and statements. For example relating to Proficiency/Competence, Conduct, Ethics and Record Keeping, Safety ○ Keep exemplary records which meet the standards required and comply with information governance ○ Describe the importance of maintaining confidentiality and demonstrate adherence to the principle of client confidentiality ○ Describe and maintain fitness to practice ○ Practice Life-Long Learning (LLL)/ Continuous Professional Development (CPD) ○ Reflect on practice and demonstrate change to own professional practice to improve service delivery ○ Reflect on the profession's use of information and communication technology, as well as the impact of technology on nutrition and health ○ Work with creativity and innovation to improve practices within the organisation and build on new opportunities within the work environment. ○ Leadership (both self and others)

3.2.2 Domain 2 Knowledge base of dietetics

	Topic	Learning outcomes
2.1	Nutritional knowledge	<i>Is able to</i>
2.11	Nutritional Science <i>(integrated with biomedical science: 2.2)</i>	<ul style="list-style-type: none"> ○ Discuss key sources of macronutrients, micronutrients, and bioactive substances such as flavonoids; their chemical structure and bio-physiological role in the body; consequences of excess and deficiency ○ Estimate the energy and nutrient requirements of individuals and populations using different methods: account for their strengths and limitations ○ Determine the energy and nutrient intake of individuals and populations; discuss strengths and limitations of methods ○ Assess body composition and show how common anthropometrical techniques can be used to inform practice

2.12	Applied Nutrition	<ul style="list-style-type: none"> ○ Understand and use published national and international tables for the energy and nutrient requirements of individuals and populations ○ Identify nutritional needs across the life span, from birth to older adults ○ Understand the link between diet and physiological changes throughout life and implications in a social and cultural context
2.2	Food Science & Food Management	<i>Is able to:</i>
2.21	Food Science	<ul style="list-style-type: none"> ○ Understand why the chemical composition of food affects the structure of a product: carbohydrate-sugars and starch; fat and fatty acids; protein and amino acids; the fractions of fibre; & alcohol. ○ Explain the composition and nutritional value of commonly consumed foods: Milk & dairy products; Meat, Fish and Eggs; Cereals; Fruit & Vegetables. Also, convenience foods; functional foods; dietetic products ○ Predict the influence of food preparation, cooking, refrigeration, freezing, distribution and food service on the chemical structure and nutrient content of food and meals ○ Explain methods for the nutritional analysis of food samples – source of food composition data ○ Give advice about food preservation: methods and their use; types and uses of food preservatives and food additives; legislation and regulation. ○ Apply and give advice about food hygiene, food technology and sensory aspects of food quality ○ Discuss how economics of food supply, production, distribution and marketing affects sustainability of food and nutrition
2.22	Food Skills & Catering	<ul style="list-style-type: none"> ○ Recognise allergens in food and can work with relevant EU, National and International legislation for food production and labelling ○ Apply techniques for the adaptation of recipes and menus for dietetic requirements ○ Recognise methods for the fortification of food and fluids ○ Estimate and know appropriate food portions and serving sizes ○ Calculate the nutritional value of food portions ○ Evaluate the sensory qualities of food ○ Give advice about the art and influence of food presentation on perception of food appeal, taste and intake
2.23	Food Management	<ul style="list-style-type: none"> ○ Discuss influences on management resources and financial control: purchasing, budgeting, legal requirements, quality standards and local agreements ○ Describe food provision in healthcare settings ○ Apply principles of menu planning: for different age groups, special needs, small scale, large scale, financial aspects, use of sustainable food sources ○ Explain industrial food production: e.g. cook chill, cook freeze ○ Apply and implement quality control systems for food safety ○ Discuss principles of risk assessment in the food environment

2.24	Food Hygiene	<ul style="list-style-type: none"> ○ Apply procedures for prevention of food poisoning & food toxins – for the safe handling and preparation of food ○ Apply legislation in relation to food hygiene and handling e.g. HACCP ○ Apply risk assessment procedures to assure personnel, food and the food environment to meet hygiene standards.
2.3	Biomedical science	<i>Is able to:</i>
2.31	Physiology	<ul style="list-style-type: none"> ○ Explain the structure and function of the human body, from cellular to organ level, with specific focus on the gastrointestinal tract, cardiovascular system, neurological systems, respiratory system, renal, reproduction, endocrine system and the effect of the ageing process on these systems ○ Explain energy use in physical activity and its role in energy balance ○ Use different methods for the measurement of energy expenditure ○ Explain the physiological control of hunger and satiety
2.32	Pathophysiology	<ul style="list-style-type: none"> ○ Understand the pathophysiology of chronic and complex diseases including, for example, under-nutrition, over-nutrition, metabolic disease, cancer and auto-immune conditions
2.33	Biochemistry	<ul style="list-style-type: none"> ○ Explain the chemistry of living processes ○ Explain metabolic pathways of energy regulation and cellular metabolism in both the fasted and fed state ○ Explain the metabolism of nutrients and other food constituents and the effect of deficient or excess intake ○ Explain the importance of hydration and water balance to all biochemical processes ○ Use and interpret biochemical measurements for the assessment of health ○ Explain the cellular and molecular basis of disease and metabolic complications that occur in common clinical conditions e.g. diabetes, hyperlipidaemia, cancer and obesity
2.34	Immunology	<ul style="list-style-type: none"> ○ Explain the underlying principles of both innate and adaptive immunity ○ Explain the role of immunity in health and in the aetiology of ill-health, with a focus on infection, autoimmune conditions and allergy ○ Discuss the effect of food and nutrients on the immunological response ○ Explain the role of the dietitian in identifying and advising clients on dietary modification for food allergy and hypersensitivity
2.35	Genetics	<ul style="list-style-type: none"> ○ Explain the principles of genetics and its role in the aetiology of ill-health ○ Discuss the impact of nutrients on gene expression/nutrigenomics ○ Discuss the principles of personalised nutrition ○ Give insight in the use of the genetic profile of an individual, along with traditional assessment, to target dietary advice more effectively

2.36	Clinical medicine	<ul style="list-style-type: none"> ○ Use medical terminology and disease classification of conditions relevant to dietetic practice ○ Give a clinical presentation about symptoms of common conditions managed with diet therapy support ○ Explain the difference between aetiology and risk factors for disease ○ Use methods of investigation to achieve a diagnosis ○ Apply common pathways of treatment and management
2.37	Clinical Pharmacology	<ul style="list-style-type: none"> ○ Explain functions, side effects and contraindication of drugs used in the treatment of conditions, where the dietitian is a key member of the professional team ○ Use the classification of drugs ○ Explain the mode of action of drug-nutrient interactions and drug-food related interactions in conditions where dietary advice can modify the pharmacological outcome. ○ Explain the use of nutrients as pharmacological agents
2.38	Microbiology	<ul style="list-style-type: none"> ○ Discuss the main classes of microorganisms and their influence on health and disease ○ Identify environmental vectors that influence spread of infection ○ Apply principles of infection control ○ Minimise the risk and spread of infection in dietetic practice ○ Identify microorganisms causing food poisoning
2.4	Social Science	<i>Is able to:</i>
2.41	Sociology and social policy	<ul style="list-style-type: none"> ○ Explain the relationship between social classification, social policy and social problems on health, health inequalities and health behaviour ○ Predict the influence of local and regional government policies on health and social care. ○ Explain the influence of religion, ethnicity, ethics, socioeconomic status, employment roles, social networks, inclusion, exclusion and social mobility on health and healthcare. ○ Demonstrate the use of sociology of health and illness during decision making of dietetic approach ○ Discuss the concept of socialisation and its application to the stages of the life-cycle. ○ Determine factors of food choice, from infancy to old age and their effect on health. ○ Explain the role of food and eating in a social context ○ Reflect on, their own practice, as well as their professional duties and responsibilities, in an organisational, administrative and social perspective and as part of the wider provision of health care
2.42	Psychology	<ul style="list-style-type: none"> ○ Explain the characteristics of human behaviour, including personality types and group dynamics ○ Apply models of health belief that explain health behaviour ○ Apply theories of motivation and behavioural change during decision making about the optimal dietetic approach ○ Understand the principles of motivational interviewing and counselling to promote behavioural change

		<ul style="list-style-type: none"> ○ Explain the principle of intrinsic and extrinsic motivation and the relationship between motivation and behavioural change ○ Explain the psychology of normal and abnormal eating behaviour; hunger, satiety and food choice; in the context of clinically defined conditions. ○ Explain the theory of empowerment and the importance of the role of empowerment in behavioural change programs
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3.2.3 Domain 3 Dietetic process and reasoning skills

	Topic	Learning outcome
3.1	Dietetic Therapy	<i>Is able to</i>
3.11	Dietary assessment methodology & monitoring	<ul style="list-style-type: none"> ○ Apply methods for the clinical assessment of individuals e.g. diet history, 24-hour recall, food & fluid charts, their interpretation and limitations ○ Perform anthropometric assessment in the clinical setting: e.g. height, weight, skinfolds, mid-arm circumference, waist measurement; hand-grip strength ○ Monitor biochemical changes in common conditions requiring dietetic therapy and explain their relevance to the dietetic process ○ Apply methods to monitor, record and evaluate client outcomes
3.12	Dietary aims and intervention	<ul style="list-style-type: none"> ○ Understand principles behind dietary and pharmacological treatment of diseases, taking lifestyle and living conditions into account ○ Work with evidence-based rationale for dietetic intervention in the treatment or prevention of illness and disease, including mental health conditions ○ Apply dietary modification for individuals or groups with differing food habits, cultural backgrounds and socioeconomic circumstances ○ Use the range of foods for special dietary purposes and describe local arrangements for prescription of dietary products; if any ○ Apply the principles of enteral and parenteral nutrition: indication, risks & benefits; the type and use of different products; prescription; monitoring; client support and use in end of life ○ Manage complex cases: to prioritise intervention when clients have multiple nutritional needs ○ Practise within the principles of ethical boundaries ○ Assess risks associated with dietary intervention e.g. the potential impact of a milk-free diet on calcium intake ○ Use dietary modification for diagnostic purposes ○ Set goals for the dietetic intervention ○ Apply the theory of empowerment and the importance of the role of empowerment, such as motivational interviewing in behavioural change programs ○ Use innovation as a method to change practice ○ Value health promotion, preventive measures, treatment and rehabilitative interventions to increase the ability of clients (and their carers) with long-term conditions to achieve a healthy day-to-day life

3.13	Dietary Records	<ul style="list-style-type: none"> ○ Use and justify which methodology for the recording of dietary records has been used ○ Work confidentially with client records in all practice settings ○ Apply legal and ethical aspects of maintaining appropriate dietary records
3.14	The Nutrition Care Process (NCP)	<ul style="list-style-type: none"> ○ Apply the steps of the Nutrition Care Process (NCP) <p>For example:</p> <ol style="list-style-type: none"> 1. Nutrition Assessment 2. Nutrition Diagnosis 3. Nutrition Intervention 4. Nutrition Monitoring and Evaluation <ul style="list-style-type: none"> ○ Explain how the use of the NCP informs dietetic practice ○ Show how the NCP can improve multi-professional working and client care ○ Apply the NCP to improve the quality of care ○ Explain how the use of a standardised language can be used for evidence-based practice
3.2	Public Health Nutrition	<i>Is able to:</i>
3.21	Public Health Nutrition Policy	<ul style="list-style-type: none"> ○ Discuss the strategic role of public health nutrition policy in setting targets at a local, national and European level for measuring nutrition and health in groups, communities and populations ○ Value the role of the dietitian in the design and evaluation of public health policies ○ include food security and food sustainability in public health nutrition policy at a local, national and European level ○
3.22	Nutritional Assessment	<ul style="list-style-type: none"> ○ Understand a range of methods to assess the nutritional health of groups, communities and populations
3.23	Health Improvement	<ul style="list-style-type: none"> ○ Apply theories of health improvement and health promotion in a nutritional context for the primary prevention of illness and disease ○ Apply methods to promote healthy food choices amongst individuals, groups and communities e.g. schools, youth services, local authority ○ Explain the influence of physical activity on nutritional status ○ Discuss different approaches to design and implement nutritional health improvement projects. ○ Understand the necessity to monitor and evaluate health improvement projects.

3.2.4 Domain 4 Evidence base in dietetics

	Topic	Learning outcome
4.1	Epidemiology	<i>Is able to:</i>
		<ul style="list-style-type: none"> ○ Apply the theoretical basis of nutritional epidemiology for the determination and evaluation of nutritional risk factors for ill health ○ Interpret nutritional survey data to develop strategies for health improvement
4.2	Evidence Based Practice (EBP)	<i>Is able to:</i>
		<ul style="list-style-type: none"> ○ appreciate the evidence hierarchy in EBP ○ Use techniques of critical appraisal to evaluate the scientific literature relevant to dietetics ○ Apply the client-practitioner-evidence triage in EBP ○ Discuss the limitations and benefits of clinical guidelines, frameworks and pathways ○ Value 'Reflection' on practice to inform decision making and the EBP triage
4.3	Research	<i>Is able to:</i>
		<ul style="list-style-type: none"> ○ Understand the principles of scientific enquiry, including quantitative and qualitative research methodology ○ use of descriptive and inferential statistics for the analysis of data ○ Explain the necessity for dietitians to be involved in audit, research and evaluation of practice through the recording of outcome measures, to promote change ○ Recognize risk assessment, safety issues and sustainability in research ○ Apply ethical principles in research

3.2.5 Domain 5 Autonomy, accountability & quality of dietetic practice

	Topic	Learning outcome
5.1	Self-management	<i>Able to</i>
		<ul style="list-style-type: none"> ○ Work independently as an autonomous practitioner, with appropriate line management/clinical supervision ○ Show self-awareness, reflective and accountable behaviour which improves practice and performance.
5.2	Management skills	<i>Is able to:</i>
		<ul style="list-style-type: none"> ○ Understand the principles of management and leadership and the distinction between them ○ Apply the principles of management and business skills to support innovation e.g. entrepreneurial activities to improve service delivery.
5.3	Leadership	<i>Is able to:</i>
		<ul style="list-style-type: none"> ○ Identify factors that must be considered to lead, manage and work successfully with individuals, groups and communities ○ Use leadership skills to promote a good working environment

3.2.6 Domain 6 Communication, relationships and partnership skills in dietetics

	Topic	Learning outcome
6.1	Communication skills	<i>Is able to:</i>
6.11	Professional relationships	<ul style="list-style-type: none"> ○ Understand the way both verbal and non-verbal communication skills influence the effectiveness of communication ○ Explain the influence of a variety of social factors on 2-way effectiveness of communication and how the level of understanding, such as: culture, religion, ethnicity, socioeconomic status and age can affect this. ○ Use appropriate verbal and non-verbal communication skills when engaging with clients, groups and the professional team ○ Adapt style of communication to meet the need of those with communication difficulties, including hearing, language, sight, reading and mental health difficulties. ○ Appreciate level of health/food literacy of individual/group
6.12	Written communication	<ul style="list-style-type: none"> ○ Prepare grammatically and factually correct client records ○ Translate complex professional information into everyday meaningful and relevant language to inform individual, groups and communities ○ Develop relevant educational material
6.13	Presentation skills	<ul style="list-style-type: none"> ○ Prepare, deliver and evaluate (short) professional presentations and to client groups
6.14	Digital skills	<ul style="list-style-type: none"> ○ Use appropriate computer software to support professional practice, e.g. for presentations and training ○ Use digital tools for communicating, including social media, on-line advice and e-health ○ Evaluate benefits and dangers to a health professional of engaging with social media
6.2	Relationships & partnership working	<i>Is able to:</i>
		<ul style="list-style-type: none"> ○ Work effectively in partnership with clients, professionals and others to build strong working relationships and networks ○ Understand the impact of own actions on others including clients and the wider professional team ○ Value effective engagement with the wider professional team to plan, coordinate, supervise and monitor the outcome of care for individuals or groups

3.3 Programme management

3.3.1 Policies and Procedures

Delivering a programme of education for dietitians is complex and requires careful construction, with relevant policies and procedures in place for the purpose of Quality Assurance.

EFAD has provided the Curriculum Guidance above (section 3.2) to set minimum standards for the knowledge base of dietetics and practice placement guidance below (section 4) for the essential practice element of the curriculum. Overall the following guidance is offered to support the delivery and successful outcome of the student engaged in studying to become a competent dietitian.

- The programme lead will have an appropriate qualification and experience at degree level or above
- Education will be delivered jointly by an academic teaching team and placement providers with relevant qualifications and experience (please also refer to Section 4 Practice Placement Standards and Section 5 Pedagogic Standards).
- Educators will be supported to maintain up-to-date knowledge and skills to support teaching through access to study days, in-service training and attendance at life-long learning (LLL)/continuous professional development (CPD) events (refer to Section 5 Pedagogic Standards).
- Education will take place in suitable accommodation to meet the learning objectives of the programme, with adequate resources
- Educational resources will be up-to-date, safe, well-maintained and 'fit for purpose'
- Relevant equality and diversity policies must be in place to ensure that the programme is inclusive of all who wish to access the programme
- Suitable policies and procedures are in place to:
 - Ensure student admission to the programme is based on appropriate and explicit selection and entry criteria
 - Check new staff and students for previous criminal convictions
 - Provide health and wellbeing support for staff and students
 - Provide learning and IT support for students
 - Respond to complaints raised by staff and students
 - Monitor and evaluate delivery of the curriculum and assessment processes

3.3.2 Curriculum Delivery

- The curriculum of an HEI should be mapped against 'EFAD Competencies of the Graduate Dietitian' and 'EFAD Curriculum Guidance' as outlined in this document
- Placement education should meet EFAD European Practice Placement Standards, as outlined in Section 4
- Delivery of the curriculum will be supported by the integration of theory and practice at all levels of the educational programme
- Delivery of the curriculum is based on a philosophy of 'evidence-based practice', with a focus on the critical appraisal of literature and research, to ensure the programme remains current and relevant
- Teaching and learning should be supported with a diverse variety of teaching methods to meet learning objectives
- The programme has processes in place respond to student feedback to ensure it remains stimulating and appropriate to learner needs

3.3.3 Assessment

- A variety of assessment methods are used across the programme to support assessment/understanding of theoretical knowledge, application of theoretical knowledge, and practical skills
- Assessments are fair and appropriate to demonstrate that learning objectives are achieved
- Students are normally informed of the assessment method of a component of learning at the start of the period of study, to support preparation for assessment
- An appropriate pass mark of no less than 40% is in place for components of learning
- There will be an effective Quality Control process in place to ensure that assessment methods and standards are appropriate to the programme
- Examination Board policies and procedures are explicit and monitored to assure quality of education is maintained.

Reference

EFAD (2008) International Code of Ethics and Code of Good Practice. Agreed by the International Confederation of Dietetic Associations (ICDA); Adopted by the European Federation of the Associations of Dietitians (EFAD) September 2008

APPENDIX 1

A GUIDE TO USING THE ACADEMIC STANDARDS WITHIN A SPECIFIC DIETETIC PROGRAMME

Following the development of the Academic Standards, which cover all areas of dietetic specialisation, this Guide was produced to support curriculum design and mapping for individual programmes. The tables below highlight aspects of the curriculum where differing levels of detail will be appropriate within specific degree programmes. The overlap between public health and clinical is broad and dietetic programmes commonly produce graduates with transferrable skills to work in either area. It is recognised that most specialisation happens at advanced practice level and the EFAD Advanced Competencies reflect this. However, the food service training pathway is substantially different. The Guide has colour coded the areas that differ in the depth of content required between the 3 specialities. Those (differing level) academic standard domains have been colour coded to reflect this. All the other areas from the domains apply (equally) to all dietetic programmes and hence the learning outcome section is blank within the Guide.

Red (food service focus)

Areas that are most relevant to food service dietitian training and covered in depth within curriculum.

Less relevant to clinical dietetics, hence a broad general understanding may be more appropriate than coverage in depth within the curriculum programme.

(We gratefully acknowledge degree programme information obtained via ESDN- Food Service to inform this mapping)

Highlighted yellow (clinical focus)

areas that are most relevant to clinical dietetic training and covered in depth within the curriculum.

Less relevant to food service dietetics, hence a broad general understanding may be more appropriate than coverage in depth within the curriculum programme.

Blue (public health focus)

Areas that are most relevant to public health dietetic training and covered in depth within curriculum.

Less relevant to clinical and food service dietetics, hence a broad general understanding may be more appropriate than coverage in depth within the curriculum programme.

3.2.1. Domain 1 Healthcare professionalism

	Topic	Learning outcome
1.1	Professionalism	<i>Is able to</i>
1.11	Professionalism in Dietetics	<ul style="list-style-type: none">Describe the importance of maintaining standards of confidentiality and demonstrate adherence to the principle of client confidentiality

3.2.2. Domain 2 Knowledge base of dietetics

	Topic	Learning outcomes
2.1	Nutrition	<i>Is able to</i>
2.11	Nutritional Science <i>(integrated with biomedical science: 2.2)</i>	<ul style="list-style-type: none">Assess body composition and show how common anthropometrical techniques can be used to inform practice.

2.12	Applied Nutrition	
2.2	Food Science & Food Management	<i>Is able to:</i>
2.21	Food Science	
2.22	Food Skills & Catering	<ul style="list-style-type: none"> Recognize allergens in food and can work with relevant EU, National and International legislation for food production and labelling
2.23	Food Management	<ul style="list-style-type: none"> Discuss influences on management resources and financial control: purchasing, budgeting, legal requirements, quality standards and local agreements. Describe food provision in healthcare settings Apply principles of menu planning: for different age groups; special needs; small scale; large scale; financial aspects; use of sustainable food sources Explain industrial food production: e.g. cook chill; cook freeze. Apply and implement quality control systems for food safety Discuss principles of risk assessment in the food environment
2.24	Food Hygiene	<ul style="list-style-type: none"> Apply procedures for prevention of food poisoning & food toxins – for the safe handling and preparation of food Apply legislation in relation to food hygiene and handling e.g. HACCP Apply risk assessment procedures to assure personnel, food and the food environment to meet hygiene standards.
2.3	Biomedical science	<i>Is able to:</i>
2.31	Physiology	<ul style="list-style-type: none"> Use different methods for the measurement of energy expenditure
2.32	Pathophysiology	<ul style="list-style-type: none"> (all learning outcomes are relevant to all 3 specialisms)
2.33	Biochemistry	<ul style="list-style-type: none"> Use and interpret biochemical measurements for the assessment of health Explain the cellular and molecular basis of disease and metabolic complications that occur in common clinical conditions e.g. diabetes, hyperlipidaemia, cancer and obesity
2.34	Immunology	<ul style="list-style-type: none"> Explain the underlying principles of both innate and adaptive immunity Discuss the effect of food and nutrients on the immunological response

2.35	Genetics	<ul style="list-style-type: none"> ○ Explain the principles of genetics and its role in the aetiology of ill-health ○ Discuss the impact of nutrients on gene expression/nutrigenomics ○ Discuss about the principles of personalised nutrition ○ Give insight in the use of the genetic profile of an individual, along with traditional assessment, to target dietary advice more effectively
2.36	Clinical medicine	<ul style="list-style-type: none"> ○ Use medical terminology and disease classification of conditions relevant to dietetic practice ○ Give a clinical presentation about symptoms of common conditions managed with diet therapy support ○ Explain the difference between aetiology and risk factors for disease ○ Use methods of investigation to achieve a diagnosis ○ Apply common pathways of treatment and management
2.37	Clinical Pharmacology	<ul style="list-style-type: none"> ○ Explain functions, side effects and contraindication of drugs used in the treatment of conditions, where the dietitian is a key member of the professional team ○ Use the classification of drugs ○ Explain the use of nutrients as pharmacological agents
2.38	Microbiology	<ul style="list-style-type: none"> ○ Apply principles of infection control ○ Minimise the risk and spread of infection in dietetic practice
2.4	Social Science	<i>Is able to:</i>
2.41	Sociology and social policy	<ul style="list-style-type: none"> ○ Demonstrate the use of sociology of health and illness during decision making of dietetic approach ○ Reflect on, their own practice, as well as their professional duties and responsibilities, in an organisational, administrative and social perspective and as part of the wider provision of health care
2.42	Psychology	<ul style="list-style-type: none"> ○ Apply models of health belief that explain health behaviour ○ Explain the psychology of normal and abnormal eating behaviour; hunger, satiety and food choice; in the context of clinically defined conditions.

3.2.3 Domain 3 Dietetic process and reasoning skills

	Topic	Learning outcome
3.1	Dietetic Therapy	<i>Is able to</i>
3.11	Dietary assessment methodology & monitoring	<ul style="list-style-type: none"> ○ Perform anthropometric assessment in the clinical setting: e.g. height, weight, skinfolds, mid-arm circumference, waist measurement; hand-grip strength

		<ul style="list-style-type: none"> ○ Monitor biochemical changes in common conditions requiring dietetic therapy and explain their relevance to the dietetic process ○ Apply methods to monitor, record and evaluate client outcomes
3.12	Dietary intervention	<ul style="list-style-type: none"> ○ Manage complex cases: to prioritise intervention when clients have multiple nutritional needs ○ Use dietary modification for diagnostic purposes ○ Set goals for dietetic intervention
3.13	Dietary Records	
3.14	The Nutrition Care Process (NCP)	<ul style="list-style-type: none"> ○ Apply the steps of the Nutrition Care Process (NCP) For example: <ul style="list-style-type: none"> 5. Nutrition Assessment 6. Nutrition Diagnosis 7. Nutrition Intervention 8. Nutrition Monitoring and Evaluation ○ Explain how the use of the NCP informs dietetic practice ○ Show how the NCP can improve multi-professional working and client care ○ Apply the NCP to improve the quality of care ○ Explain how the use of a standardised language can be used for evidence based practice
3.2	Public Health Nutrition	<i>Is able to:</i>
3.21	Public Health Nutrition Policy	<ul style="list-style-type: none"> ○ Discuss the strategic role of public health nutrition policy in setting targets at a local, national and European level for measuring nutrition and health in groups, communities and populations. Value the role of the dietitian in the design and evaluation of public health policies ○ Follow and discuss elaboration of food security, food sustainability and public health policy at a national and European level
3.22	Nutritional Assessment	○
3.23	Health Improvement	<ul style="list-style-type: none"> ○ Apply theories of health improvement and health promotion in a nutritional context for the primary prevention of illness and disease. ○ Discuss different approaches to design and implement nutritional health improvement projects. ○ Understand the necessity to monitor and evaluate health improvement projects.

3.2.4 Domain 4 Evidence base in dietetics

	Topic	Learning outcome
4.1	Epidemiology	<i>Is able to:</i>
4.2	Evidence Based Practice (EBP)	<i>Is able to:</i>
		<ul style="list-style-type: none"> ○ Apply the client-practitioner-evidence triage in EBP ○ Discuss the limitations and benefits of clinical guidelines, frameworks and pathways ○ Value 'Reflection' on practice to inform decision making and the EBP triage
4.3	Research	<i>Is able to:</i>

3.2.5 Domain 5 Autonomy, accountability & quality of dietetic practice

	Topic	Learning outcome
5.1	Self-management	<i>is able to</i>
5.2	Management skills	<i>Is able to:</i>
		<ul style="list-style-type: none"> ○ Understand the principles of management and leadership and the distinction between them ○ Apply the principles of management and business skills to support innovation e.g. entrepreneurial activities
5.3	Leadership	<i>Is able to:</i>
		<ul style="list-style-type: none"> ○ Identify factors that must be considered to lead, manage and work successfully with individuals, groups and communities ○ Use leadership skills to promote a good working environment

3.2.6 Domain 6 Communication, relationships and partnership skills in dietetics

	Topic	Learning outcome
6.1	Communication skills	<i>Is able to:</i>
6.11	Professional relationships	
6.12	Written communication	
6.13	Presentation skills	
6.14	Digital skills	
6.2	Relationships & partnership working	<i>Is able to:</i>

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Glossary

Administrative Dietitian or Food Service Dietitian

A dietitian who has responsibility within food service management, by providing nutritionally adequate, safe, tasty, and sustainable quality food to individuals or groups to improve health and treat disease within financial and regulatory frameworks. Food service dietitians can work in institutional, community and educational settings and other work places including food industry.

Assessment

The collection of information relating to a client's condition, taking account of the full range of relevant contextual factors, that is needed to make a clinical diagnosis and management plan.

Behavioural objective (or outcome)

A behavioural objective (or outcome) has three parts:

- a) a defined behavioural verb,
- b) described conditions that permit the behaviour called for by the verb,
- c) a description of the lower level of acceptable performance (criteria).

Clinical Dietitian

A dietitian who is responsible for planning, education, supervision and evaluation of a clinically devised eating plans to restore the client/client to functional nutritional health. Clinical dietitians can work in primary care as well as institutions.

Clinical reasoning

The critical and analytical thinking associated with the process of making clinical decisions.

Codes of practice

These may be established by the dietetic profession or incorporated into national rules and laws. They include ethical rules and principles that form an obligatory part of professional practice.

Competence (-s)

A competence defines WHAT a person is capable of doing well, effectively and following professional standards.

- Professional competence is “the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values and reflection” and “the bringing together of different components to perform, do something successfully or manage complex situations”.
- Competence can only be demonstrated by the students/learners showing that they have the competency to perform something.
- Competence is an outcome: it describes what someone can do. It does not describe the learning process which the individual has undergone.
- Competence represents a dynamic combination of knowledge, understanding, skills and abilities
- Practical work experience is essential to gain, maintain and improve competence
- In order to reliably measure someone's ability to do something, there must be clearly defined and widely accessible competence standards through which performance is measured and accredited
- Competence is a measure of what someone can do at a particular point in time.

Competency (-ies)

Competency is a skill whereas competence is the attribute of a person's practice in context. The focus is concentrated on the learners and their actions rather than upon predetermined products, or it can mean active participation through learning. Learning programmes (in Higher Education or elsewhere) are therefore competency based programmes.

Continuing Professional Development (CPD)

The process by which professionals are able to update, maintain and enhance their knowledge, skills and expertise in order to ensure their continuing competence to practise. The process is systematic and ongoing.

Critical reflection

This involves exploring the reasons and approaches and the underlying concepts/assumptions that have been made in the period being reflected upon. The exploration is based upon an evaluation of the context and takes account of social, personal and historical influences upon the professional setting.

Evaluation/Quality assessment

Assess and review the quality of care in order to identify areas for improvement.

Evidence-based practice

A commitment to using the best available evidence to inform decision-making that involves integrating practitioners' individual professional judgement with evidence gained through systematic research.

Fitness to practise

A level of practice which demonstrates an appropriate level of knowledge and understanding, skills and competency, attitude and adherence to a code of conduct for the role currently being undertaken and a commitment to maintain that level.

Food Service Dietitian or Administrative Dietitian

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Higher Education Institute (HEI)

A recognised institution that is set-up to provide education at first cycle (bachelor) degree level, as well as other levels of education.

Independent practitioner

A person acting in their own right

Inter-professional

Two or more professionals from different disciplines working together in an integrated way, resulting in new ways of working.

Learning outcomes

Learning outcomes are statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of learning. They can refer to a single course unit or module or else to a period of studies, for example, a first or a second cycle programme. Learning outcomes specify the requirements for award of credit. Learning outcomes are devised by academic staff and practice teachers.

Lifelong Learning (LLL)

The process of constant learning and development, incorporating continuous professional development (CPD) in which all individuals need to engage in a time of rapid change.

Multidisciplinary

One or more disciplines working collaboratively.

National Dietetic Association (NDA)

An association for dietitians in a country.

Nutrigenomics

The study of how different foods can interact with particular genes to increase the risk of disease.

Non-discriminatory practice

Professional practice within which individuals, teams and organisations actively seek to ensure that no-one (including clients, carers, colleagues or students) is either directly or indirectly treated less favourably than others are, or would be, treated in the same or similar circumstances, on the grounds of age, colour, creed, criminal convictions, culture, disability, ethnic or national origin, gender, marital

status, medical condition, mental health, nationality, physical appearance, political beliefs, race, religion, responsibility for dependants, sexual identity, sexual orientation or social class.

Practical placement /Clinical education placements

A period of education carried out in the workplace, providing the opportunity to translate theory into practice.

Professional autonomy

The power to make decisions regarding the management of the client/client based on the professional's own professional knowledge and expertise.

Public Health or Community Dietitian

A dietitian directly involved in health promotion and policy formulation which leads to the promotion food choice amongst individuals, groups to improve or maintain their nutritional health and minimizes risk from nutritionally derived illness.

Reflective practice / reflection on action

Reflecting after the event. Often involves thinking through a situation and discussing it with a colleague. It involves being self-aware and should be action orientated and lead to change.

Reflection in action

Being aware of what you are doing. Knowing and doing at the same time.

Resource

The potential or assets in a person or an organisation, e.g. time, money, equipment, staff, the specialist knowledge held by a person, which could be used to help or support others when needed.

Salutogenic

The Salutogenic orientation focus is on the origin of health & people's resources which maintains and improves the movement towards health. It gives the answer to why people despite stressful situations and hardships stay well. It is the opposite of the pathogenic concept where the focus is on the obstacles and deficits.

Self-directed learning

Independent learning that is initiated by the student.

Solution focused approach

Exercises and processes that enable students to examine their existing knowledge and develop their learning to formulate a solution to a presented question or issue and that should deepen students' learning, as well as developing their conceptual and methodological skills, thereby enhancing their overall approach to professional practice.

Specialisation/field of interest

Specialisation is focusing on part of the field of dietetics (e.g., administrative dietetics, ambulatory care, long-term care, diabetes, renal, paediatric, private practice, public health, nutrition support, research, sports nutrition).

Tool

The instrument or method.

User (s)

Anyone receiving a dietetic service – clients, clients, the public, catering services, food industry, customers.