

Guidelines for curriculum development - core fields of study*

Dietetic education in Australia is generalist: its combination of skills is such that it prepares novices for careers in a variety of settings.

These guidelines for curriculum development are designed to assist universities develop their curricula to meet the National Competency Standards for Entry-Level Dietitians. They represent the minimum requirements for program content; however, they are not exclusive. DAA respects the right of universities to develop curricula as required by each situation and strongly supports such innovation.

Section 5.1 represents underlying knowledge in nutrition and dietetics, and overall corresponds to the 14 elements in Unit 1 of the National Competency Standards. The headings state broad subject areas and are not meant to be prescriptive. **Section 5.2** represents the application of more complex knowledge and skill at a professional level. The headings represent Units 2–9 of the National Competency Standards and again, are not meant to be prescriptive.

5.1 Unit 1: Underlying knowledge

Unit 1	Underlying knowledge
Content area	Theory of human nutrition and dietetics
<i>Elements</i>	1.1 Applies current knowledge of the theory of human nutrition and dietetics and related practice to a level which supports safe practice 1.14 Applies clinical reasoning theory
<i>Knowledge</i>	<ul style="list-style-type: none"> › Physical and biological sciences <ul style="list-style-type: none"> – Anatomy – Organic chemistry – Biochemistry – Physiology, including GIT, cardiovascular, renal, pulmonary, immune and endocrine systems – Pathophysiology – Chronic disease management – Pharmacology, as it affects drug-nutrient interactions – Genetics and nutrigenomics – Exercise science, including the interaction between nutrition and physical performance and wellbeing › Nutrition and dietetics <ul style="list-style-type: none"> – Nutrition screening and assessment tools – Procedures for assessing nutritional status – Nutrition needs of various community groups and the nutrition problems of specific at-risk groups, particularly in Australia – Methods of assessment for individuals and groups, (Dietary interviews, history-taking and recording, description of food habits, Anthropometric methodology, reference standards and their applications) – Qualitative and quantitative methods of estimating nutrient intakes – Nutrient metabolism, including requirements through the lifecycle, effects of deficiency and toxicity, role and function of non-nutritive substances in human metabolism – Medical nutrition therapy, including biochemical and physiological parameters of diseases related to nutrition; clinical signs of nutrition status, the definition and classification of nutrition disorders and factors affecting biochemical measurements, and reference standards – Complementary and alternative nutrition and herbal therapies and impact of dietary supplements › Evidence-based practice <ul style="list-style-type: none"> – Published evidence based practice guidelines related to nutrition, dietetics, medicine and health, including those available in national and international agencies

Unit 1 (cont.)	Underlying knowledge
Content area	Social, cultural, psychological, environmental, economic and political factors influencing food supply, habits, diet and lifestyle
<i>Elements</i>	<p>1.2 Describes personal, social, cultural, psychological, environmental, economic and political factors influencing food and food use, food habits, diet and lifestyle</p> <p>1.3 Describes food systems, food use, and food and nutrition policy</p> <p>1.4 Demonstrates knowledge of foods and food preparation methods used in the practice community</p>
<i>Knowledge</i>	<ul style="list-style-type: none"> › Society and food <ul style="list-style-type: none"> – The nature of society and factors affecting food and eating – Ecological and sustainability issues of food supply and food policy – Environmental and political influences on food consumption patterns (including state and federal government health & food policy); – Food systems › Eating attitudes and culture <ul style="list-style-type: none"> – Influence of socioeconomic, cultural and psychological factors on food and nutrition behaviour (including mental health, literacy) – Influences of cultural background on food habits and choices, including CALD and Aboriginal and Torres Strait Islander groups, and other potentially vulnerable groups – Understanding of cultural competency and its impact on health – Equity and equality issues in access to food and nutrition services and supply (food security); – Factors affecting attitudes to food and health, including age, gender and cultural or ethnic background › Food practice and behaviour <ul style="list-style-type: none"> – Food consumption trends in Australia – Development of food guides and social marketing about food and health issues – Patterns of food marketing, distribution and consumption – History and future use of food – Practices in domestic and institutional food use, including culinary techniques – Preparation and ingredient composition of foods and meals, including the impact of foods eaten away from home – Food serving sizes and portions
Content area	Food service systems and management
<i>Elements</i>	1.6 Describes and compares food service systems
<i>Knowledge</i>	<ul style="list-style-type: none"> › Institutional food service preparation <ul style="list-style-type: none"> – Large and small scale cooking equipment – Principles of menu planning and recipe standardisation – Principles of food preparation on small and large scale – Principles of portion control and equipment size – Quantity cookery equipment and methods of use – Policies & procedures › Food service management <ul style="list-style-type: none"> – Principles of quality management, including accreditation; – Measuring of outcomes and evaluation, including benchmarking;
Content area	Education and learning theory and practice
<i>Elements</i>	1.7 Applies the basic principles of education theory as it applies to nutrition and dietetic practice
<i>Knowledge</i>	<p>1.13 Applies principles of learning theory</p> <ul style="list-style-type: none"> › Theories of learning and education, including principles of adult learning › Philosophy of nutrition education › Characteristics of helping relationships › Group education techniques, including knowledge of a variety of written and oral presentation modalities › Evaluation methods

Unit 1 (cont.)	Underlying knowledge
Content area	Communication and counselling
<i>Elements</i>	1.8 Demonstrates or employs effective communication and counselling strategies as they apply to nutrition and dietetic practice
<i>Knowledge</i>	<ul style="list-style-type: none"> > Theories of behavioural changes and behaviour modification > Communication theory > The communication process, models, enhancers and distracters > Communicating in culturally diverse settings including CALD and Aboriginal and Torres Strait Islander groups > Advocacy > Sociology and human behaviour > Principles of individual counselling in the community including motivational interviewing > Methods of self-analysis
Content area	Health promotion and public health
<i>Elements</i>	1.9 Describes and compares theories of health promotion, program planning, and management and public health
<i>Knowledge</i>	<ul style="list-style-type: none"> > Definitions and descriptions of public and community health policies <ul style="list-style-type: none"> – History and philosophy of Australian and international public health movements – International health and nutrition policies, such as those promoted through the World Health Organisation – Social, environmental and psychological determinants of health > Definitions and descriptions of nutrition and health policies and practices <ul style="list-style-type: none"> – Australian Federal and State Health policy, including nutrition guidelines and policies – Nutrition and health in developing countries – Nutrition problems in Australian communities – Population statistics & demographics > Program planning, implementation and evaluation <ul style="list-style-type: none"> – Description of community profiles – Issues which influence the nature of, access to and effectiveness of health services – Knowledge of local food use information from demographic, epidemiological and anthropological sources – Consumer legal issues – Needs assessment of communities and populations – Principles of program management, including assessment, planning, implementation and evaluation > Health promotion theory and strategies <ul style="list-style-type: none"> – Theories of health education, health promotion, health advocacy and community development – Capacity building

Unit 1 (cont.)	Underlying knowledge
Content area	Organisation, management and professional ethics
<i>Elements</i>	1.10 Relates theories of organisation, management and marketing to nutrition and dietetic practice
<i>Knowledge</i>	<ul style="list-style-type: none"> > Leadership and management theory and practice <ul style="list-style-type: none"> – Management and leadership styles – Types of groups and their dynamics – Quality management – quality improvement – Risk assessment > Organisational structure and behaviour <ul style="list-style-type: none"> – Principles of industrial relations – Theories of planning, including strategic planning – Principles of human resource management – Principles of conducting meetings and meeting etiquette > Business principles and planning <ul style="list-style-type: none"> – Business planning (including small businesses) – Principles of financial planning, budgeting & accounting – Development of business cases – Marketing principles – Methods for compiling reports and submissions – Business contracts > Industrial relations and legislation <ul style="list-style-type: none"> – Acts of law, including Workplace Health and Safety, Anti-discrimination Act, Privacy Act, Guardianship and Advanced Health Directives – Insurance – Professional liability and indemnity > Professional issues <ul style="list-style-type: none"> – History of the dietetics profession – Scope of practise – Duty of care – Accredited Practising Dietitian program – DAA policies and guidelines – Codes of professional conduct and ethics
Content area	Research and evidence based practice
<i>Elements</i>	1.11 Conducts or uses nutrition research methodology, research principles and evidence based practice including qualitative and quantitative research methods
<i>Knowledge</i>	<ul style="list-style-type: none"> > Research ethics and principles for conducting clinical trials > Knowledge of quantitative and qualitative research methods > Principles of research design, including data management and statistical analysis > Principles of evidence based practice, including critical appraisal of the literature > Principles of epidemiology and sampling methodology

5.2 Units 2–9: Knowledge and skill at professional level

Unit 2 Demonstrates effective and appropriate skills in listening and communicating information, advice, education and professional opinion to individuals, groups and communities

- › Knowledge of the relationships between food eaten and the development and treatment of disease and use of this knowledge in counselling, education and other forms of communication
- › Computing skills in dietary analysis, record-keeping and recipe analysis
- › Aims and behavioural objectives of education programs
- › Planning, implementation and evaluation of education programs

Unit 3 Collects, organises and assesses data relating to the health and nutritional status of individuals, groups and populations

- › Knowledge of relationships between nutrition status and dietary intake data in determining individual, group and population requirements and problems
- › Knowledge of demographics and other population data influencing nutrition and food patterns
- › Understands the roles and responsibilities of the dietitian in nutrition assessment and diagnosis
- › Potential clinical signs and symptoms of major nutrition diseases
- › Biochemical indicators of major nutrition problems
- › Including social and cultural influences on nutrition and food intakes and patterns (see Element 1.2)

Unit 4 Manages nutrition care for individuals

- › Knowledge of the effects of diet and nutrition status on the development and progress of disease and disease conditions
- › Knowledge of the effects of disease and clinical condition on nutrition and health status
- › Models for case management and case presentation
- › Goals for nutrition care
- › Develop, implement and document nutrition care plans for individuals
- › Evaluation of nutrition care and its clinical impact
- › Counselling strategies for individuals and families
- › Documentation procedures
- › Knowledge of and appropriate use of resources
- › Development of high standard of nutrition care
- › Dietary modifications for menu planning and food preparation at home and in institutions
- › Health service and community structures and functions
- › Community supports relevant to clients' problems
- › Appropriate functioning within the health care team
- › Principles of pharmacology and of common medications. The interaction between nutrition & pharmacology

Unit 5 Plans, implements and evaluates nutrition programs with groups, communities or populations as part of a team

- › Food and nutrition policies and their development and use as a planning basis
- › State and federal government food laws and regulations
- › Population statistics and demographic data
- › Australia food, nutrition and physical activity survey data
- › Organisation structures relevant to community and public health
- › Issues which influence nature of, access to and effectiveness of health services
- › Food security
- › Advocacy on behalf of individuals, groups and the profession to influence the wider environment of factors affecting eating behaviour and nutrition standards
- › Roles of food manufacturers, consumers and the media in food and nutrition policy formation
- › Knowledge of interdepartmental and inter-agency co-operation in reducing barriers to promoted eating habits
- › Understands community development
- › Knowledge of community expectations and legal rights of families
- › Principles and models of development and evaluation of nutrition programs in a community setting
- › Health promotion strategies and activities
- › Cost-effectiveness of differing strategies
- › Resources: equipment staff, budgeting

Unit 6 Manages components of a food service to provide safe and nutritious food

- > Food service systems, plant and equipment for large and small institutions
- > Principles of portion control and equipment size in a practical situation
- > Principles of menu planning and recipe standardisation for food service systems
- > Resource utilisation in food service systems, and costing procedures
- > Food service policy, procedure and standards
- > Development of nutrition philosophies and guidelines for food services
- > Computing skills in recipe analysis and costing procedures
- > Health and food law in food service practices
- > Understanding of the principles of personnel management

Unit 7 Integrates research and evaluation principles into practice

- > Review and utilisation of professional literature in professional issues
- > Application of research questions to particular projects
- > Statistical manipulation of data
- > Systematic interpretation of nutrition and dietary assessment results
- > Principles of quality assurance and peer review in actual situations

Unit 8 Applies management principles in the provision of nutrition services, programs and products

- > Role of the dietitian as a consultant
- > Networking with other staff and resource people
- > Benchmarking and other measures of outcomes and outputs
- > Knowledge of funding sources (e.g. Medicare, HACCC, Health Depts. Private Health Insurers)
- > Simple cost-control measures and budgeting
- > Basic principles of human resource management

Unit 9 Demonstrates a professional, ethical and entrepreneurial approach advocating for excellence in nutrition and dietetics

- > Reflective practice
- > Cultural competency
- > DAA, Code of Ethics and DAA Code of Professional Practice
- > Other professional codes of practice and organisational codes of conduct
- > Principles of continuing professional development including the DAA Accredited Practising Dietitian (APD) Program