

The Nutrition Competency Framework (NCF) for medical graduates.

This describes four knowledge and five skill based competencies which have been developed over three years by a team of medical and nutrition professionals. The nutrition competencies have been mapped to the current Australian Medical Council (AMC) Graduate Outcome Statements (www.amc.org.au). Extensive consultation with key bodies has been undertaken in the reviewing and refinement of the NCF. There is an extended version of the NCF on the website to provide examples of the range of relevant topics, learning outcomes, and examples of assessment strategies. It is hoped that the NCF will provide a useful reference point for entry-level medical courses throughout Australia. We are interested in any feedback you may wish to provide on this framework. Contact caryl.nowson@deakin.edu.au

Competency Number	Nutrition Competency (knowledge- or skill-based)	Student Learning Outcomes/Objectives (SLOs)
K1 SCIENCES	Demonstrate understanding of the <u>basic sciences</u> in relation to nutrition	1. Describe the functions of essential nutrients, and the basis for the biochemical demand for energy and nutrients
		2. Describe the integrative normal processes of appetite, eating, intestinal function, digestion, absorption and nutrient utilisation and common disorders that affect them
		3. Differentiate the energy and nutrient requirements across the lifespan for normal growth, structure and function
K2 PREVENTION	Demonstrate knowledge of the interactive role of nutrition in health and the <u>prevention</u> of disease	1. Recognise the common nutrition-related causes of mortality and morbidity in the population
		2. Describe how nutrition affects health and risk factors for disease
		3. Describe how disease can affect nutritional status
K3 TREATMENT	Demonstrate knowledge of evidence-based dietary strategies for prevention and <u>treatment of disease</u>	1. Recognise the role of nutrition in treatment of disease
		2. Describe the dietary management strategies for relevant medical conditions and diseases
		3. Demonstrate an appreciation of nutrient/drug interactions
K4 FOOD	Demonstrate awareness of food sources of nutrients, food habits and the cultural and social importance of food	1. List the food sources of major nutrients
		2. Describe how the social determinants of health influence food consumption patterns and the consequences of this
		3. Appreciate the social and cultural importance of food



Competency Number	Nutrition Competency (knowledge- or skill-based)	Student Learning Outcomes/Objectives (SLOs)
S1 RISK	Demonstrate skills in the identification of nutritional risk, nutritional deficits and excesses	1. Assess nutrition risk factors pertaining to over- and undernutrition
		2. Integrate nutrition in the medical history and physical examination
		3. Interpret and integrate findings from the nutritional assessment to define nutritional problems
S2 CRITICAL	Demonstrate ability to interpret nutrition evidence in a critical and a scientific manner and apply appropriately in clinical practice	1. Locate and critically appraise literature on nutrition related to prevention and treatment of disease
		2. Apply an evidence-based approach in the delivery of appropriate nutrition management in clinical practice
S3 APPLICATION	Demonstrate ability to apply basic dietary strategies for prevention and treatment of medical conditions, disease and trauma, with recognition that many nutritional issues require specialist management by a dietitian	1. Prioritise nutritional management strategies
		2. Explain nutritional risk factors for common diseases to patients and their families
		3. Provide basic evidence-based advice on nutrition to patients
		4. Where appropriate integrate nutrition goals into care plans, including referral to other professionals as required, particularly dietitians
S4 ETHICS	Demonstrate the ability to apply principles of ethics related to nutritional management	1. Apply ethical and legal requirements to the decision-making process concerning nutrition
S5 TEAM	Demonstrate ability to work effectively in a team with other health professionals to deliver optimal nutrition care	1. Recognise the limitations of one's own knowledge and skills and refer or consult with another health practitioner as appropriate
		2. Understand, respect, incorporate and support the roles of other health professionals in nutritional management of patients

The NCF describes the learning outcomes for each of the knowledge- and skill-based competencies for medical graduates. A relevant range of variables provide contexts and environments in which competency could be demonstrated. Important explanatory notes to the NCF include:

- Owing to the breadth of contextual variables, some learning outcomes may be repeated as applicable across many contexts and/or environments to demonstrate competency.
- A medical graduate should demonstrate all competencies by the end of medical training. Due to various medical training models, time periods (e.g. end of year 1) have not been specified.
- The terms 'Student Learning Outcome', 'Graduate Competencies' and/or 'Graduate Attributes' may be used across various institutions to describe the skills and knowledge students will achieve.
- K = knowledge, S = skill

