

# CORE COMPETENCIES REFERENCE MANUAL FOR PUBLIC HEALTH PUBLIC HEALTH NUTRITIONISTS TO PRACTISE IN ZAMBIA

**CORE COMPETENCIES AND MINIMUM STANDARDS** 

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#### QUALIFICATION AND RESPONSIBILITIES

**Title of the programme**: Bachelor of Science Human Nutrition OR BSc Nutrition and Dietetics or equivalent.

**Key accountability for the job**: This cadre has contact with patients at primary, secondary and tertiary level of care.

Primary roles and responsibilities:

- Provision of preventive nutrition care services to at risk communities
- Assess patient's nutritional and health needs
- Providing effective nutritional interventions in accordance with religious or cultural preferences
- Provide health and nutrition promotion by talking to families
- Explain important nutrition issues to people in at risk communities
- Delivery of group education sessions on nutrition and health topics
- Implementing and coordinating nutrition programmes
- Keep up to date with scientific research on nutrition

#### 1.0 INTRODUCTION

The Health Professions Council of Zambia (HPCZ) is a statutory body that was established by the Health Professions Act No. 24 of 2009. The Act renames and continues the existence of the Medical Council of Zambia established by the Medical and Allied Professions Act of 1977. The Health Professions Act No. 24 provides for the registration of health practitioners and regulation of their professional conduct; provides for the licensing of health facilities and the accreditation of health care services provided by health facilities; and provides for the recognition and approval of training programmes for health practitioners.

Following the issuance of the guidelines for introduction of licensing examinations for health professionals to be registered with the Health Professions Council of Zambia, this bulletin provides an outline of the core competencies and minimum standards for registrants who have completed the Bachelor of Science in Human Nutrition of its equivalent seeking non-specialist registration as a Public health nutritionist in Zambia.

# 2.0 EXIT EXAMINATIONS AND AWARD OF THE BACHELOR OF SCIENCE IN A NUTRITIONAL SCIENCE BY TRAINING INSTITUTIONS

Training institutions, private or public, local and foreign approved by the Health Professions Council of Zambia are mandated to examine and graduate their students under their own seal and authority as prescribed by the HPCZ act number 24 of 2009. The Bachelor of Science holder of this qualification will be required take and pass the HPCZ licensing examination to qualify for registration with the Council as a Public Health Nutritionist. The Nutritionists trained for the health sector are able to function in a health facility.

# 3.0 LICENSURE EXAMINATIONS BY THE HEALTH PROFESSIONS COUNCIL OF ZAMBIA

A person shall not practise as a health practitioner, unless that person is registered as a health practitioner in accordance with the Health Professions Act No. 24 of 2009. In the exercise of its functions under this Act, the 2<sup>nd</sup> Council and the 3<sup>rd</sup> Council of the Health Professions Council of Zambia instituted Licensure Examinations to help maintain standards given the emergence of multiple private and public training institution. This "Bulletin of Information on the Core Competencies and Minimum Standards for the Licensing Examinations for Nutritionist to Work in Zambia" binds all parties regulated under this Act. Examination fess for licensure examinations, as prescribed by the Council, are payable to the Health Professions Council of Zambia as part of the eligibility to sit licensing examinations.

The HPCZ Licensing Examination assesses a Public Health Nutritionist's ability to apply knowledge, concepts, and principles, and to demonstrate fundamental patient-centred skills, that are important in nutrition and health and that constitute the basis of safe and effective patient care. The HPCZ Licensing Examination includes, but is not limited to, theoretical and clinical examinations which complement each and the other components. No component is a stand-alone in the assessment of readiness for Nutrition practice in Zambia.

The candidate will be assessed under three domains, namely:-

- 1. Knowledge
- 2. Skills
- 3. Attitude

The above domains will be assessed by means of a theory exam comprising of multiple choice questions followed by a composite objective structured clinical examination (OSCE). The six **subject areas** (assessed under all three learning domains) for Public Health Nutritionists in Zambia are:

- 1. Human Nutrition
- 2. Nutrition Communication
- 3. Food science
- 4. Public Health and Nutrition
- 5. Dietetics/clinical nutrition

6. Food Service systems management

Other subject areas prescribed by the curriculum such the biomedical and social sciences will only be assessed as cognitive domain in the theory paper. The overall expected outcomes of the Nutritionist licensure examination is to ensure that the candidate will meet the minimum standards for the role in providing nutrition care service at all levels of health care.

#### 4.0 COMPETENCE OUTCOME GUIDELINES

The curriculum must have identified attributes in each educational domain (knowledge, skills and attitude) and present them to guide student learning and assessment by examiners. HPCZ directs Nutritionists to be compassionate and empathetic in caring for patients and to be trustworthy and respectful in all their professional dealings. Nutritionists have a responsibility to provide nutritional care that enhances the lives and health that are entrusted to them by patients. The competencies and outcome guidelines are a minimum requirements for entrance into the profession at the point of qualification. Below are the overall outcomes the graduate nutrition technologist is expected to exhibit:

- a. **Knowledge**: demonstrates knowledge sufficient to ensure safe practice
- b. **Communication**: demonstrates effective and appropriate skills in listening and communicating information, advice, education and professional opinion to individual's groups and communities
- c. Collection, analysis and assessment of nutrition/health data: Collects organises and assesses data relating to the health and nutritional status of individuals, groups and populations
- d. **Individual Case Management**: Manages client-centred nutrition care for individuals
- e. Community and Public Health Nutrition and Advocacy for Food Supply: Plans, implements and valuates nutrition programs with groups, communities and populations as part of a team
- f. **Food Service Management**: Manages components of a food service to provide safe and nutritious food

- g. **Research and Evaluation**: Integrates research and evaluation principles into practice
- h. **Management and organisation**: Applies management principles in the provision of nutrition services, programs and products
- Professionalism, advocacy, innovation and leadership: Demonstrates a
  professional ethical and entrepreneurial approach advocating for excellence in
  nutrition and dietetics

#### 5.0 CORE COMPETENCIES: GRADUATE NUTRITIONIST

The basic structure of the competency standards presented highlights three important attributes (knowledge, skills, and attitudes) required to perform core nutrition functions. Knowledge is essential in the practice on Public health nutrition in the health sector. The practice involve the integration of knowledge form different subject areas. The integration allows for the public health nutrition practitioner to be able do a comprehensive nutrition assessment and to come up with realistic nutrition interventions with the client. To be able to come up with realistic interventions, public health nutrition professional should have the skill to analyse the information collected and be able to communicate with the patient and other medical team members. Skill is concentrated on the actions or activities that can be performed. Attitude focuses acting in an expected manner.

# Outcome 1. Knowledge

Competence	Outcome
Integrates	1. Understands the normal anatomy, physiology, biochemistry of
knowledge of	human nutrition and dietetics science
Physical, chemical	2. Explains the pathophysiological processes that affect nutritional
and biological	and dietetic practice
sciences in the	3. explains the interaction between drugs and diet in a patient
provision of	4. Describes the chemical composition and properties of foods
services	5. Describes the nutritional value of foods
	6. Explains the principles of food processing and preservation
	7. Describes how processing and preservation can affect the
	nutritional value of foods
	8. Explains the principles of food hygiene, quality and safety
	9. Describes the principles that govern food laws and regulations

	10. Intermed the high distance that date with the first of
	10. Interpret the biological factors that determine the health and nutritional status of individuals and populations
	11. Applies knowledge of nutritional physiology and biochemistry to
	public health nutrition analysis and practice
	12. Applies knowledge of dietary requirements across age-groups,
	gender and health states to effective public health practice
Integrates	Identify the effects of social, psychological, and behavioural
knowledge of	factors on individual and population health, including prevention,
behavioural and	treatment and management of chronic disease, adjustment to
social sciences in	illness, adherence to treatment regimens, and promotion of
the provision of	recovery
nutrition and	2. Explains the impact of the environment, economic and political
dietetic service	factors in influencing food and food use, food habits, diet and lifestyle
	3. Examine evidence regarding factors that influence individual
	health behaviour, health status and utilization of health services
	4. Examine social and cultural factors, including the mass media, which influence the health behaviour of individuals
	5. Analyses the social and cultural factors that influence individual dietary behaviour, health status and utilisation of health services
	6. Analyses the economic factors that influence individual dietary
	behaviour, health status and utilisation of health services
	7. Describe the structure and dynamics of the political and
	bureaucratic systems and identify the roles of various institutions
	(government and non-government) in shaping health policy
	8. Critically analyse how structures, contexts and processes of
	government and legislation impact on health programs and
	policies, including international contexts
Integrates	Demonstrates knowledge of foods and food preparation methods
knowledge of food,	used in the practice community
food systems,	1. Identify barriers to change for the client drawing upon relevant
human nutrition	counselling methods and devise strategies to address these in
and applied	collaboration with the client
nutrition in the	2. Describes key nutritional problems of public health importance,
provision of service	their epidemiology, underlying metabolism and consequences for
	health
	3. Describes and compares theories of health promotion, program
	planning, and management and public health
	4. Appraise the contribution of epidemiology, toxicology and
	ecology to environmental risk assessment and risk management
	and identify the principles of risk assessment, risk management
	and risk communication
	5. Applies knowledge of food composition to relevant aspects of
	practice
	<b>6.</b> Uses contemporary and evidence based food guidance devices
	and nutritional education to promote optimal population dietary
	behaviour
	7. Incorporates knowledge of food science to inform public health
	nutrition practice
	<b>8.</b> Develop dietary assessment protocols for population level dietary
	assessment using various methods appropriate to context,
	resources and purpose
	resources and purpose

	<ul> <li>9. Identifies and uses appropriate dietary methodology to collect retrospective, current and prospective food and nutrient intakes for individuals which identify nutrient and food intake patterns as required by the situation</li> <li>10. Is able to estimate nutrient intake for individuals using food composition tables and/or databases and compare with Nutrient Reference Values (NRVs) or estimated requirements</li> <li>11. Selects suitable methods for assessment of anthropometry and body composition</li> <li>12. Is able to interpret anthropometric and body composition and nutritional assessment data using appropriate reference ranges</li> <li>13. Recognises clinical signs of malnutrition</li> <li>14. Accurately interprets dietary, health, medical, anthropometric, and body composition data against standards relevant to the nutritional issues</li> </ul>
Integrates business and management principles in the provision of service	<ol> <li>Describes and compares food service systems</li> <li>Describes food systems, food use, and food and nutrition policy</li> <li>Demonstrate a thorough knowledge of food and nutrition service management in a variety of settings.</li> <li>Assess food and nutrition services using a variety of evaluation methods, including quality management, best practice, benchmarking, quality improvement and satisfaction tools and processes.</li> <li>Describe and apply the procedures involved in translating policy into organisational structures and plans</li> <li>Describe human resources principles for organizational development, conflict resolution, and motivation of personnel</li> <li>Describes financial management for health programs, including budgeting</li> </ol>
Communicates effectively and responsibly using multiple means	<ol> <li>Communicates with individuals, groups, organisations and communities from various cultural socioeconomic, organisational and professional backgrounds to enable them to take actions to improve nutrition and health outcomes applying the principles of learning theory</li> <li>Applies the basic principles of education theory as it applies to public health nutrition practice</li> <li>Develops education material that is evidence-based, culturally sensitive, and pitched at the appropriate literacy level, to meet the needs of the target group</li> <li>Applies the basic principles of education theory as it applies to public health nutrition practice</li> <li>Translates technical nutrition information into practical advice on food and eating</li> <li>Methods of listening to and involving the public and communities in improving health and reducing inequalities</li> </ol>
Demonstrates knowledge of quality assurance of nutrition and dietetic practice	<ol> <li>Critically appraise and translate scientific knowledge and principles related to nutrition into practical information for health professionals, clients and the general public.</li> <li>Identifies and communicates the health, fiscal, administrative, legal, social and political implications of policy options</li> </ol>

- 3. Describes and apply the components and processes of a major policy analysis using epidemiological, economics and social science tools
- 4. Identify and understand the role of risk factor surveillance to inform analysis of diet-related problems.
- 5. Utilise data from monitoring and surveillance todescribe trends in risk factors for diet-related disease, among key population groups

## Outcome 2. Skills

Competence	Outcome
Communicates effectively and	1. Communicate effectively with patients, their family,
responsibly using multiple means	peers, seniors and other medical teams
	2. Be able to use verbal, written and electronic modes of
	communication
	3. Design and carry out nutrition education programme
	based on the principles and approaches of nutrition
	education
	4. Develops and delivers educational sessions for small
	groups  5. Communicates effectively with individuals, families
	5. Communicates effectively with individuals, families, groups, communities, colleagues and political decision
	makers
	6. Demonstrate effective written and oral communication
	in a range of contexts
Integrates knowledge of food,	Perform nutrition assessment including anthropometric
food systems, human nutrition	and food intake assessment
and dietetics in the provision of	2. Collect relevant dietary information
service	3. Analyse and interpret the collected data to determine
	the health and nutritional status of individuals
	4. Assesses and assigns priorities to all data
	5. Make a nutritional diagnosis
	6. Create realistic solutions to nutrition problems
	according to recommendations for the prevention and
	control of diet related or life style related diseases
	7. Build capacity of, and collaborate with others to
	improve nutrition and health outcomes.
	8. Assesses opportunities to improve nutrition and food
	supply in a community or population group
	9. Plans and implement nutrition programs with the
	population group
Interpreted by singer and	10. Makes recommendations on food and nutrition policy
Integrates business and management principles in the	1. Assesses opportunities to improve nutrition and food standards within a food service institution
provision of service	2. Develops plans to provide safe and nutritious foods in
provision of service	a food service institution
	3. Implements activities to support delivery of quality
	nutrition and food standards within a food service
	4. Applies organisational, business and management

	skills in the practice of nutrition and dietetics.
Demonstrates knowledge of quality assurance of nutrition and dietetic practice	<ol> <li>Utilise data from monitoring and surveillance to describe trends in risk factors for diet-related disease, among key population groups</li> <li>Analyse a health problem and identify the appropriate level/s at which to target the disease, condition or determinant, and population groups to be targeted</li> <li>Utilises latest evidence in behaviour change theory, education theory and nutrition science to design a nutrition education program (including an educational resource) for a specific group of participants</li> </ol>

# Outcome 3. Attitude

Competence	Outcome
1. Professionalism and Ethical Conduct	<ol> <li>Demonstrates awareness of local, regional and international ethical codes</li> <li>Maintain confidentiality</li> <li>Treat patients with respect and maintain their dignity</li> <li>Obtain consent</li> <li>Develops and maintains a credible professional role by commitment to excellence of practice</li> <li>Demonstrates cultural competency</li> <li>Identify the values and principles that underlie public health nutrition policy debates, organisational practices, and program planning and evaluation</li> <li>Applies principles of ethical decision making in the context of clinical and cost effectiveness</li> <li>Applies ethical principles to the collection, maintenance, use and dissemination of data and information</li> <li>Apply culturally-relevant and appropriate approaches with people from diverse cultural, socioeconomic and educational backgrounds, and persons of all ages, genders, health status, sexual orientations and abilities</li> </ol>
Demonstrates interpersonal skills, professional autonomy and accountability	<ol> <li>Be a team player and understand own role in the team</li> <li>Understand expertise of other team members</li> <li>Demonstrate leadership</li> <li>Demonstrate efficiency and punctuality</li> <li>Prioritize work and implement innovative ideas</li> </ol>
Demonstrates knowledge of quality assurance of nutrition and dietetic practice	Prioritize work and implement innovative ideas     Participate in appraisals, performance reviews and assessments     Identify own limitations and act upon them     Engage in CPD activities

- 4. Be an effective mentor and teacher to dietetic students and colleagues
- 5. Demonstrate interest and capacity to share knowledge and experiences gained through practice to colleagues and other professionals

## 6.0 BLUE PRINT FOR WEIGHTING

<b>Competency Domain</b>	Percentage
Theory Exam (50%)	50
• Nutrition (Food, food systems, human nutrition and dietetics)	20
• Communication	10
Management (business management, food service management, marketing, resource management)	5
• Research	5
Physical, chemical and biological sciences	4
• Social sciences (sociology, psychology, economics)	4
Professionalism issues	2
Total	50
Practical Exam (50%)	50
• Nutrition (Integration of food, food systems, human nutrition and dietetics in practice)	30
Communication practice	10
• Management	5
Professionalism issues or research	5
Total	50

#### 8.0 CORE PROCEDURES

For Nutritionist and dietician alike, the process they have to be conversant with is the nutrition care process. Knowledge and skill of performing this process allows for the professional to collect the subjective and objective information efficiently, analyze the data, provide a nutrition diagnosis and come up with realistic interventions. The intervention will allow the nutritionist develop a monitoring and evaluation plan.

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