



# PUBLIC HEALTH NUTRITION, COMMUNITY NUTRITION, RESEARCH AND PROFESSIONAL PRACTICE COURSE

## 6 Month Comprehensive Virtual Course

A complete development pathway for nutrition students and graduates who want to work beyond direct clinical dietetic practice. The course develops skills in public health nutrition, community nutrition, population assessment, community needs assessment, nutrition education, behavior change, survey design, research methodology, scientific writing, program planning, monitoring, evaluation, policy, professional practice and independent nutrition projects.

### Who This Course Is For

Nutrition students and graduates who want to build a professional pathway in public health nutrition, community nutrition, community based programs, NGOs, schools, research, nutrition education, health promotion, corporate wellness, food and nutrition programs, policy, communication or independent nonclinical nutrition initiatives.

### Course Approach

The course starts with the professional role of a nutritionist in community and public health settings, then progresses into community nutrition assessment, epidemiology, surveys, behavior change, program development, research, scientific writing, evaluation, policy and professional project development.

### Research Component

Participants learn how to develop a research question, select an appropriate methodology, design a survey, understand sampling, plan data collection, interpret basic data, structure a research proposal and write the major sections of a scientific research article.

### Overall Aim

To develop nutritionists who can understand population and community nutrition problems, assess communities, design evidence informed interventions, conduct structured research activities, evaluate outcomes and translate nutrition knowledge into organized professional work.



## COURSE ROADMAP

| Month          | Primary Development Area                                                        | What the Participant Should Gain                                                                                                                                            |
|----------------|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Month 1</b> | Foundations of Nutritionist, Community and Public Health Practice               | Understand the role of a nutritionist beyond direct clinical care and recognize how nutrition problems develop within communities and populations.                          |
| <b>Month 2</b> | Community Nutrition Assessment, Epidemiology and Nutrition Surveys              | Learn how to assess communities, identify vulnerable groups, develop surveys, collect community information, interpret public health data and define nutrition priorities.  |
| <b>Month 3</b> | Nutrition Education, Communication and Behavior Change                          | Learn how to communicate evidence responsibly, understand behavior and design nutrition education for different audiences and settings.                                     |
| <b>Month 4</b> | Community and Public Health Nutrition Program Planning and Implementation       | Learn how to convert a community nutrition problem into a structured intervention with objectives, activities, stakeholders, resources and an implementation plan.          |
| <b>Month 5</b> | Nutrition Research, Methodology, Data and Scientific Writing                    | Learn how nutrition research is planned, how methodology is selected, how surveys and data are handled and how a research proposal or scientific article is structured.     |
| <b>Month 6</b> | Monitoring, Evaluation, Policy, Community Projects and Professional Development | Learn how to evaluate programs, understand food systems and policy, build a professional portfolio and develop an independent community or public health nutrition project. |

## MONTH 1: FOUNDATIONS OF NUTRITIONIST, COMMUNITY AND PUBLIC HEALTH PRACTICE

**Theme:** Understand nutrition beyond individual patient care.

**Purpose:** To introduce the wider professional role of a nutritionist and build a clear understanding of community nutrition, population nutrition, life course nutrition and the social and environmental influences on health.

| Week | Focus                                                                   | Learning Content                                                                                                                                                                                                                                                                          | Practical Application                                                                                                                                                      |
|------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | Understanding the Role of a Nutritionist in Community and Public Health | Professional roles in community nutrition, public health nutrition, schools, NGOs, research, corporate wellness, nutrition education, food programs, health promotion and nutrition communication. Professional scope, ethics, boundaries and collaboration with other professionals.     | Participants map possible career pathways and identify the settings and types of nutrition work that interest them most.                                                   |
| 2    | Community Nutrition Across the Life Course                              | Nutrition priorities across infancy, childhood, adolescence, adulthood, pregnancy, lactation and older age. Community based approaches for vulnerable groups, families and life stages. Understanding how age, setting and social context change nutrition priorities and program design. | Participants compare two community groups and identify how nutrition priorities, barriers and intervention approaches differ.                                              |
| 3    | Understanding Community and Public Health Nutrition                     | Community nutrition versus public health nutrition. Population health, determinants of health, social determinants of nutrition, poverty, education, culture, gender, food access, environment, local resources and health systems.                                                       | Participants analyze a community nutrition problem and identify biological, social, cultural, economic and environmental contributors.                                     |
| 4    | Major Population Nutrition Problems                                     | Undernutrition, micronutrient deficiencies, overweight, obesity, noncommunicable diseases, food insecurity, nutrition transition, malnutrition in all its forms and the double burden of malnutrition.                                                                                    | Participants select one population nutrition problem and prepare a concise problem analysis describing who is affected, why it matters and what may be contributing to it. |

**Development Outcome:** Participants should understand that nutrition problems are not created by food choices alone and that professional nutrition work can influence entire populations.

## MONTH 2: COMMUNITY NUTRITION ASSESSMENT, EPIDEMIOLOGY AND NUTRITION SURVEYS

**Theme:** Before solving a community problem, learn how to measure and understand it.

**Purpose:** To teach participants how to assess communities and populations, interpret basic epidemiological information, design nutrition surveys and identify priority nutrition needs for community action.

| Week | Focus                                            | Learning Content                                                                                                                                                                                                                                                                              | Practical Application                                                                                                                              |
|------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 5    | Introduction to Community Nutrition Epidemiology | Population, community, prevalence, incidence, risk, morbidity, mortality, association, causation and interpretation of basic population health data. Understanding how epidemiological information supports community nutrition decisions.                                                    | Participants interpret a simplified public health nutrition dataset and identify what conclusions can and cannot be made from the information.     |
| 6    | Community Nutrition Needs Assessment             | Demographic information, dietary patterns, anthropometric indicators, health indicators, food availability, food access, cultural practices, community assets, local services, environmental factors and social determinants. Identifying vulnerable groups and existing community strengths. | Participants design a structured community nutrition needs assessment framework for a selected community.                                          |
| 7    | Nutrition Surveys and Questionnaire Development  | Purpose of surveys, knowledge attitude and practice surveys, dietary surveys, demographic questionnaires, question types, wording, response options, questionnaire flow, avoiding leading questions and reducing response bias.                                                               | Participants develop a short community nutrition questionnaire for a selected target population.                                                   |
| 8    | Sampling, Data Collection and Priority Setting   | Target population, sample, inclusion criteria, exclusion criteria, basic sampling approaches, recruitment, pilot testing, field data collection, vulnerable groups, feasibility, severity and community priority setting.                                                                     | Participants develop a practical community survey implementation plan and use sample findings to select one priority nutrition problem for action. |

**Development Outcome:** Participants should be able to define who needs to be studied, what information should be collected, how it should be collected and how community needs are prioritized.

## MONTH 3: NUTRITION EDUCATION, COMMUNICATION AND BEHAVIOR CHANGE

**Theme:** Giving information is not the same as changing behavior.

**Purpose:** To develop practical communication and behavior change skills for community, public health and professional nutrition settings.

| Week | Focus                                                          | Learning Content                                                                                                                                                                                                                     | Practical Application                                                                                                                             |
|------|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 9    | Community Nutrition Education                                  | Difference between nutrition information, nutrition education and health promotion. Community learning needs, audience assessment, literacy, language, culture, age, message clarity and selection of appropriate education methods. | Participants develop a community nutrition education session for a defined group.                                                                 |
| 10   | Nutrition Behavior Change                                      | Why knowledge alone does not guarantee behavior change. Motivation, beliefs, social norms, environment, access, confidence, readiness, barriers and introductory behavior change concepts used in health promotion.                  | Participants analyze the barriers behind a nutrition behavior and redesign the education approach so that it addresses more than knowledge alone. |
| 11   | Evidence Based Nutrition Communication                         | Nutrition misinformation, social media claims, public messaging, responsible communication, communicating uncertainty, avoiding fear based statements and translating scientific evidence into understandable language.              | Participants critique a misleading nutrition message and rewrite it as a balanced, responsible and evidence informed public message.              |
| 12   | Designing Community Nutrition Education for Different Settings | Nutrition education in schools, universities, workplaces, maternal groups, community centers, older adult groups and digital platforms. Adapting one message according to audience, setting, literacy and available resources.       | Participants create two versions of the same nutrition topic for two different target populations.                                                |

**Development Outcome:** Participants should be able to understand the audience, identify barriers and communicate nutrition in a way that is evidence informed, appropriate and realistic.

## MONTH 4: COMMUNITY AND PUBLIC HEALTH NUTRITION PROGRAM PLANNING AND IMPLEMENTATION

**Theme:** Turn a nutrition problem into a structured intervention.

**Purpose:** To teach participants how to move from community nutrition assessment to an organized community or public health nutrition program with realistic goals, measurable objectives and a clear implementation plan.

| Week | Focus                                                         | Learning Content                                                                                                                                                                                                                                             | Practical Application                                                                                                                      |
|------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 13   | Community Nutrition Problem Analysis and Program Objectives   | Root cause analysis, target population, program aim, specific objectives, measurable outcomes, short term outcomes, long term outcomes and identifying what can realistically be changed.                                                                    | Participants convert one community nutrition problem into a clear program aim and measurable objectives.                                   |
| 14   | Designing Community and Public Health Nutrition Interventions | Community nutrition education, local food access strategies, school programs, maternal and child nutrition initiatives, screening and referral programs, supplementation and fortification concepts, environmental approaches and policy related approaches. | Participants design a multicomponent intervention that addresses more than one contributor to the selected nutrition problem.              |
| 15   | Community Engagement, Stakeholders and Partnerships           | Community leaders, families, local organizations, government departments, NGOs, schools, healthcare professionals, private organizations, partnership building, participatory planning and meaningful community involvement.                                 | Participants create a stakeholder map and define who should be involved during planning, implementation and evaluation.                    |
| 16   | Community Program Implementation and Project Management       | Activity planning, timelines, responsibilities, resources, basic budgeting, logistics, risk management, ethics, safeguarding, documentation and team communication.                                                                                          | Participants develop an implementation table for a community nutrition project showing activities, responsibilities, resources and timing. |

**Development Outcome:** Participants should understand how a nutrition problem is converted into a practical program rather than remaining only an idea or awareness campaign.

## MONTH 5: NUTRITION RESEARCH, METHODOLOGY, DATA AND SCIENTIFIC WRITING

**Theme:** Learn how nutrition evidence is actually created.

**Purpose:** To give participants a practical understanding of the research process from research idea and methodology selection to survey design, data handling, proposal writing and scientific article development.

| Week | Focus                                                     | Learning Content                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Practical Application                                                                                                                                                                        |
|------|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 17   | From a Community Nutrition Problem to a Research Question | What research is, identifying a researchable nutrition problem, developing a problem statement, research questions, general and specific objectives, hypotheses where appropriate, variables, literature review, evidence hierarchy and identifying a research gap.                                                                                                                                                                                                      | Participants develop a community or public health nutrition topic into a problem statement, research question and clear study objectives.                                                    |
| 18   | Research Methodology and Study Design                     | Quantitative research, qualitative research, mixed methods, cross sectional studies, case control studies, cohort studies, intervention studies, randomized controlled trials, ecological studies and survey research. Population, study setting, eligibility criteria, sampling, sample size concepts, validity, reliability, bias, confounding and study limitations.                                                                                                  | Participants receive different nutrition research questions and select the most appropriate study design while explaining the reason for their choice.                                       |
| 19   | Community Surveys, Research Ethics and Data Management    | Questionnaire structure, open questions, closed questions, Likert scales, knowledge questions, attitude questions, practice questions, dietary questions, pilot testing, questionnaire revision, informed consent, confidentiality, privacy, voluntary participation, vulnerable populations, ethical approval, variable coding, data sheets, missing data and data cleaning.                                                                                            | Participants build a community nutrition research survey and prepare a data collection and data management plan while identifying ethical requirements before real participant recruitment.  |
| 20   | Data Interpretation and Scientific Article Writing        | Descriptive statistics, frequency, percentage, mean, median, basic interpretation of relationships, qualitative coding and themes, statistical significance versus practical importance. Scientific article structure including title, abstract, introduction, methods, results, discussion, limitations, conclusion, recommendations and references. Plagiarism, paraphrasing, authorship, conflict of interest, journal selection, peer review and publication ethics. | Participants prepare either a complete research proposal or a structured research manuscript using a practice or approved dataset. They also draft the key sections of a scientific article. |

**Development Outcome:** Participants should understand how research is planned, conducted, interpreted and communicated, and should be able to develop a structured research proposal or scientific manuscript framework.

## MONTH 6: MONITORING, EVALUATION, POLICY, COMMUNITY PROJECTS AND PROFESSIONAL DEVELOPMENT

**Theme:** Use evidence to create meaningful population impact.

**Purpose:** To bring together public health nutrition, research and professional practice by teaching participants how to evaluate programs, understand wider systems and develop an independent professional project.

| Week | Focus                                                       | Learning Content                                                                                                                                                                                                                                                                                                              | Practical Application                                                                                                                                                                                                              |
|------|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 21   | Community Program Monitoring and Evaluation                 | Difference between monitoring and evaluation. Process indicators, output indicators, outcome indicators, impact indicators, baseline information, follow up information, reach, participation, implementation quality and interpretation of change.                                                                           | Participants build a monitoring and evaluation framework for the community or public health nutrition intervention developed in Month 4.                                                                                           |
| 22   | Nutrition Policy, Advocacy and Food Systems                 | Food policy, food environments, labeling, fortification, food security, agriculture and nutrition, school food policies, advocacy, systems thinking and communicating nutrition priorities to decision makers.                                                                                                                | Participants select a nutrition problem that cannot be solved through education alone and propose an appropriate policy, environmental or systems response.                                                                        |
| 23   | Professional Community Nutrition and Public Health Practice | Career pathways in community nutrition, NGOs, public health, research, schools, local development programs, corporate wellness, nutrition education, health campaigns, project work and nutrition communication. Professional portfolio, networking, continuing professional development and responsible service development. | Participants define a professional pathway and prepare a portfolio framework showing the skills and project experience needed for that direction.                                                                                  |
| 24   | Community Nutrition Project and Professional Presentation   | Project proposal development, report structure, presenting data, stakeholder communication, ethical promotion, sustainability, scale and future implementation. Bringing together public health nutrition, research and professional development.                                                                             | Participants present and defend a final professional project that may focus on a community nutrition intervention, research proposal, education initiative, wellness program or another appropriate nonclinical nutrition service. |

**Development Outcome:** Participants should finish with a clear professional direction and the ability to develop, communicate and evaluate an evidence informed nutrition project.



## FINAL COURSE PORTFOLIO

| Portfolio Component                                      | Final Output                                                                                                                                       |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Community Nutrition Assessment                           | A structured assessment of a selected community, including nutrition needs, vulnerable groups, local barriers, resources and priority concerns.    |
| <b>Nutrition Survey</b>                                  | A professionally structured questionnaire or survey tool designed for a defined nutrition purpose.                                                 |
| <b>Research Question</b>                                 | A clear research question supported by a problem statement and appropriate study objectives.                                                       |
| <b>Research Proposal</b>                                 | A structured proposal including methodology, population, sampling, data collection, ethics and an analysis plan.                                   |
| <b>Scientific Writing</b>                                | A draft research article framework or structured manuscript exercise using appropriate scientific sections.                                        |
| <b>Evidence Appraisal</b>                                | Critical interpretation of nutrition evidence and the ability to recognize limitations and overclaiming.                                           |
| Community and Public Health Nutrition Program            | A complete community or population nutrition intervention with goals, objectives, activities, stakeholder involvement and implementation planning. |
| <b>Nutrition Education Material</b>                      | An audience appropriate education resource designed for a specific setting.                                                                        |
| <b>Monitoring and Evaluation</b>                         | A framework containing relevant process, output, outcome and impact indicators.                                                                    |
| <b>Policy or Advocacy Component</b>                      | A proposed systems, environmental or policy response to a selected nutrition problem.                                                              |
| <b>Professional Portfolio</b>                            | A record of skills, projects and professional development completed during the course.                                                             |
| Community Nutrition or Professional Nutritionist Project | An independent community, research, education, wellness or public health project suitable for the participant's professional direction.            |



## EXPECTED COURSE TRANSFORMATION

| At Entry                                                                                  | At Completion                                                                                                                                      |
|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| I know nutrition, but I do not know what a nutritionist can do outside clinical practice. | I understand professional opportunities across community nutrition, public health, research, education, policy and nonclinical nutrition services. |
| I see a community nutrition problem but do not know how to approach it.                   | I can conduct a community nutrition assessment, identify vulnerable groups, contributing factors, available resources and realistic priorities.    |
| I think nutrition education mainly means giving information.                              | I understand audience needs, behavior change, barriers and responsible health promotion.                                                           |
| I do not know how to design a public health nutrition program.                            | I can develop a structured intervention with objectives, activities, stakeholders, resources and measurable outcomes.                              |
| I read research articles but do not understand how the research was actually done.        | I understand study design, sampling, surveys, variables, bias, ethics, data collection and the logic behind research methodology.                  |
| I want to write research but do not know where to begin.                                  | I can develop a research question, proposal, methodology plan and scientific manuscript structure.                                                 |
| I do not know how to evaluate a program.                                                  | I can select indicators, monitor implementation and evaluate whether meaningful change occurred.                                                   |
| I do not understand how policy and food systems connect with nutrition.                   | I can identify when a nutrition problem requires environmental, systems or policy action.                                                          |
| I want to start a professional nutrition project but do not know how to structure it.     | I can design an evidence informed community, research, education, wellness or public health nutrition project within my professional scope.        |

## FINAL LEARNING PATHWAY

| Stage    | Learning Progression                                                                                                |
|----------|---------------------------------------------------------------------------------------------------------------------|
| Stage 1  | Understand the role of the nutritionist in community nutrition and public health nutrition.                         |
| Stage 2  | Assess communities, identify vulnerable groups and interpret basic epidemiological information.                     |
| Stage 3  | Design surveys and identify nutrition priorities.                                                                   |
| Stage 4  | Understand behavior and develop appropriate nutrition education.                                                    |
| Stage 5  | Design and implement community and public health nutrition programs.                                                |
| Stage 6  | Plan nutrition research and select an appropriate methodology.                                                      |
| Stage 7  | Develop surveys, manage data and understand research ethics.                                                        |
| Stage 8  | Write a research proposal and structure a scientific article.                                                       |
| Stage 9  | Monitor and evaluate nutrition programs.                                                                            |
| Stage 10 | Understand policy, food systems and advocacy.                                                                       |
| Stage 11 | Develop a professional community nutrition, research or public health project and define a future career direction. |