



***Dietitians of Canada***  
***Les diététistes du Canada***

**Public Health Nutrition Competencies:  
Summary of Key Informant Interviews**

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partnership with the Public Health Agency of Canada

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## Introduction

The goal of the Public Health Nutrition Competencies Project was to gather information to lay the groundwork required to develop competencies that are unique to public health nutrition in Canada. This project supports the Public Health Agency of Canada in its work to strengthen the public health workforce in Canada. The project has two components, both of which were guided and supported by a Pan Canadian Advisory Committee (Appendix A):

- a literature review that synthesized existing published and non-published literature related to discipline-specific competencies required of public health nutrition professionals, and,
- a telephone interview process that gathered information from key informants related to the following public health nutrition practice issues within the Canadian context: the structure/organization of public health nutrition practice in Canada; roles and functions of nutrition professionals; and issues and challenges facing the profession.

The second component of the project is summarized in this report, the objectives of which were to:

- Investigate the structure/organization of public health nutrition in Canada and the current workforce of public health nutrition professionals including roles, functions, issues and challenges;
- Investigate the attitudes, experiences and beliefs of selected/identified public health nutrition key informants related to the unique knowledge, skills and abilities (i.e. competencies) required of dietitians/nutrition professionals working in public health.

## Methodology

A qualitative study design using semi-structured interviews conducted with identified key informants was used to achieve the objectives outlined above. Twenty-nine semi-structured individual telephone interviews were conducted between July and September 2006 with key informants within the public health nutrition field across the country. The 29 key informants, over half of whom were recommended by the project Advisory Committee, represented various perspectives believed to be important to the research, including geographic/regional points of view, perspectives associated with different levels of government, academic/educational institutions' insights and other leadership perspectives within the profession. The remaining key informants were members of the Federal/Provincial/Territorial Group on Nutrition. Contact information was obtained either from the Dietitians of Canada membership database or the Federal/Provincial/Territorial Group on Nutrition contact list.

**Table 1 Key Informant Distribution by Perspective of Interest**

<b>Perspective</b>	<b>Number of Key Informants</b>
Provincial/Territorial Government	12
Public Health Nutrition Manager/Team Leaders	4
Academic & Internship Programs	2
Remote/Geographically Isolated/Aboriginal	2*
Front-Line Public Health Nutrition Professionals	8
Federal Government or Federally Funded-Organization	1*
Total	29

\* One respondent brought both the perspective of a public health nutrition professional working with aboriginal populations and with the Federal government.

The research process was approved by the University of Toronto Ethics Review Office prior to initiation. All participants were contacted by telephone in advance of the interviews to introduce the study and schedule interview appointments. To allow for a considered response, participants received a consent form, an information letter (Appendix B) and the interview guide (Appendix C) via e-mail at least several days in advance of the scheduled interview. At the outset of the process, up to three call-back attempts were made to potential participants; within the last two weeks of the project time allotted for interviews, a maximum of two call-backs were made. Only five out of a total of 38 individuals contacted to participate in the interview process declined the opportunity and in addition, only four individuals contacted did not return calls within the project timelines. Interviews ranged in length from 30 to over 90 minutes with the majority being approximately 40 minutes in duration. All interviews and analyses were conducted by Cathy Chenhall, M.H.Sc, P.Dt., Project Consultant.

All interviews were audio taped and notes were taken throughout the interview process. An adapted content analysis approach was used to organize the data thematically into response categories. Information collected on the structure/organization of public health nutrition in Canada was analyzed descriptively.

## **Summary of Key Findings**

### **Structure of Public Health Nutrition Services**

With the exception of one provincial/territorial jurisdiction, public health nutrition services across Canada are delivered through regionalized health organizations having a variety of names including regional health authorities, district health authorities and Boards of Health, among others. Public health nutrition professionals are employed by

these health organizations and generally work within Public Health departments or divisions within the regionalized structures. Within these Public Health departments or divisions, public health nutrition professionals are either members of a multi-disciplinary program team or a nutrition-specific group which provides support to program teams. Within one provincial/territorial jurisdiction, Public Health services are centralized, and as a result, public health nutrition professionals are employees of the provincial/territorial government.

Nutrition services for communities of one specific population subgroup are funded, directed and supported through a national office staffed by nutrition professionals. Regional offices of the same federal government department division receive program-based funding, a portion of which all regional offices are currently using to employ regional nutritionists to support program implementation and evaluation. Formal communication and engagement processes exist between staff in the national nutrition office and regional nutritionists.

Several provincial jurisdictions have networks or associations of public health nutrition professionals, having varying degrees of formality, which perform a variety of roles. These roles include networking and professional development, advocacy, and facilitating coordinated responses or approaches to public health nutrition-related issues, programs, services and resources within a jurisdictional context.

Each province and territory has a representative on the Federal/Provincial/Territorial Group on Nutrition (FPTGN). The FPTGN, established over 50 years ago supports a collaborative working relationship among federal, provincial and territorial governments related to information exchange, and collaborative policy, program and resource development in community/public health nutrition<sup>1</sup>. While varying in terms of formality and frequency of contact, public health nutrition professionals within regionalized health organizations tend to have an information sharing and informal, collaborative working relationship with their respective FPTGN representative.

Respondents reported on a variety of standards/guidelines/policies that direct public health nutrition practice including the following:

- national dietary guidance recommendations; including those developed for specific population subgroups
- international recommendations
- provincial acts and regulations (health, child protection, privacy)
- policies and standards for provincial government programs
- policies and standards for federal government programs
- requirements for membership with Dietitians of Canada and requirements for registration or licensing with provincial dietetic regulatory bodies
- jurisdictional healthy eating strategies
- government strategic plans; including recent public health system review processes
- strategic plans of regional health organizations
- administrative policies of employing organizations

- input from communities
- position descriptions
- role and function documents prepared for and/or by public health professionals, including nutritionists

One respondent noted that the provincial legislative requirement (Health Promotion and Protection Act and Regulations) in her jurisdiction stipulates that public health nutritionists have a Masters degree or equivalent prior to employment. The same respondent expressed that this legislative requirement is a unique policy directing or influencing practice which could provide an interesting framework for future competency development.

### **Roles and Functions of Public Health Nutrition Professionals**

While key informants used varied terms (and in many cases, role and function statements) to describe or define public health nutrition, most generally expressed that public health nutrition involves promoting the improved nutritional health of the population through the application of nutrition science and knowledge of the determinants of healthy eating to communities and populations.

Common phrases used to describe public health nutrition included the following:

- prevention of nutrition-related diseases and conditions/primary prevention for the population
- population health approach; including consideration of the needs of the whole population and distribution of risk across the population
- addressing determinants of health (root causes); improving the health of vulnerable populations
- working with communities/community development approaches
- nutrition/health promotion
- working with partners in a variety of sectors
- nutrition education and communication (accurate information provision) to various publics, including intermediaries (e.g. public health colleagues)
- use of a variety of strategies (e.g. partnership, policy development, advocacy, systems change, etc.)
- working for environments, policies and legislation that support access to healthy foods
- life course (change) and healthy growth and development perspective

One respondent defined public health nutrition as the application of a nutrition lens to the following five generally accepted public health functions: population health assessment, health promotion, disease and injury prevention, health surveillance and health protection. The same respondent identified the following three principles which distinguish public health (and public health nutrition) from other aspects of the health system: a focus on the population, determinants of health and the root causes of disease and disability; consideration of the needs of the whole population; and, interventions that

are based on consideration of how social change can be facilitated from a life course perspective.

In defining the practice area, one respondent emphasized its differences from other areas of dietetic practice and supported the importance of having competency statements specific to public health nutrition.

While most did not, several key informants expressed that public health nutrition within their respective jurisdiction does involve direct service delivery and individual nutrition counseling, most often for specific target populations or groups (e.g. prenatal and postpartum women).

Building on the descriptors outlined above, common, major roles of public health nutrition professionals expressed by key informants, mainly as functions and/or strategies, included the following:

- nutrition assessment of groups and populations
- project and program planning, coordination, implementation and evaluation
- policy development and policy influencer (including standard setting)
- health promotion through awareness raising, education and skill building, supportive environments and policy development
- communication (including written and oral communication, media, social marketing) and public and professional education (including role as consultant and resource development)
- collaboration and partnerships (communities and those within and outside health sector); role as partner, collaborator and influencer
- community capacity building
- project management
- advocacy for accessibility to healthy, affordable, safe food and other issues related to healthy eating (internal and external to organization); representation of community to various levels of government
- research and evaluation (including interpretation and application within practice) to further nutrition knowledge and practice
- monitoring and support of nutrition programs; quality assurance
- facilitation
- consultant and advisor
- preceptor/mentor; education of upcoming dietitians and other health professionals

While perhaps implicit within the responses of several key informants, referring to work with a specific population subgroup, one respondent explicitly referred to the role of dietitians working with "... communities, programs and services to help plan and integrate approaches to improve health while addressing the diversity in traditions and culture".

Roles that were less commonly expressed by informants reflecting a more hands-on role for public health nutrition professionals included the following:

- skills training including food purchasing and preparation

- resource development
- direct service (community presentations, workshops, responding to public telephone inquiries)
- individual nutrition counseling/community-based clinical practice

Within one provincial jurisdiction, public health nutrition professionals have a unique role related to monitoring and enforcement of regulations for licensed residential child and adult care facilities. Primary and clinical care involving a number of population subgroups, including home care, is stated as a primary function of public health nutrition professionals within the same jurisdiction.

In some cases, the roles listed above are currently provided by public health nutrition professionals (or specifically public health or community dietitians) within a specific jurisdiction and/or in a few cases they are desired roles of public health nutrition professionals in the future. Within one jurisdiction, a continuum of public health nutrition professional roles was described. The continuum includes roles performed by lay individuals (e.g. skills training) to those performed by Masters prepared public health nutritionists (e.g. policy and program development, implementation and evaluation, etc.).

Related to roles, one respondent noted that planning, implementing and evaluating program and policy interventions that have an impact on the nutritional health of the population is a key role of public health nutrition professionals. The respondent expressed a concern, however, that these skills are not well developed within preparatory programs. Added to this was the view that the exploration of the evidence-base for effective interventions requires more attention.

The variation in roles (i.e. direct service versus population health approaches) among public health nutrition professionals seems to be a function of several factors within jurisdictions: the capacity of public health nutrition professionals (enhanced and reduced), dietetic and overall health services within a jurisdiction relative to community needs; level of understanding of decision-makers within employing organizations related to public health; geography and related recruiting challenges.

### **Changing Roles and Functions in the Future**

Respondents shared a variety of perspectives related to the potential, changing role of public health nutrition professionals in the future. Support from employing organizations, academic institutions providing pre-service education and organizations providing continuing education/professional development were mentioned several times as necessary to facilitate the role changes described below. The following trends were noted by several respondents as impetuses affecting the role of public health nutrition professionals: the obesity epidemic, increased incidence of nutrition-related chronic diseases and conditions, increased public interest in nutrition, population health research recognizing the importance of nutrition in several life stages, increased availability of nutrition surveillance data, recognition of the ongoing problem of income and health



disparities (including food security), and political interest in public health workforce capacity.

Common perspectives included:

- increased public demand for public health nutrition services
- enhanced and broadened role for public health nutrition professionals (e.g. additional population groups) to respond to increased public demand
- enhanced accountability requirements for public health, including (outcome) evaluation of programs and services
- evidence-based practice
- enhanced practice using population health, community development and upstream, systems change approaches (including enhanced program and policy focus and the creation of supportive environments)
- expanded role related to addressing the determinants of health and healthy eating, including policy-related actions to eliminate socioeconomic disparities and inequities
- greater emphasis on health promotion, social marketing and innovative communication technologies
- enhanced multi- and interdisciplinary practice
- less direct service and more direct service in some cases (including increased roles for public health dietitians for services currently being provided by public health nurses and roles for public health nutrition professionals within the context of primary health care reform)

While not as common as those perspectives shared above, several respondents expressed a desire or hope that an increased number of 'qualified' (i.e. graduate studies prepared with experience) public health nutrition professionals will be available for employment to support their preferred population health/systems-focused public health nutrition role.

While perhaps implicit within many of the preferred futures stated above, one respondent articulated that it would likely be necessary for public health nutrition professionals to acquire enhanced knowledge and understanding of the complexity of factors that influence nutritional health among populations, beyond expertise in nutrition science. Prior to acquiring enhanced knowledge and training, one respondent reaffirmed the need for public health nutrition professionals to, first, be registered dietitians.

Respondents from within one jurisdiction expressed that, if the current trend continues, having an increased number of public health nutrition professionals in (subject-area) specialist roles will be a future reality. In another jurisdiction, a key informant expressed a desire for more distinction between the roles of Masters trained and non-Masters trained dietitians working in public health.

## **Training and Qualifications**

To work as a public health nutrition professional in Canada, based on interviews conducted with key informants in all provincial/territorial jurisdictions, an individual must have completed an accredited undergraduate/Bachelor's degree in nutrition along with an accredited internship or practicum program and have (or be eligible) for membership/licensure with a provincial dietetics regulatory body. While this requirement was stated as a standard, in very few instances was licensure a formal provincial/territorial government policy. Exceptions to this qualification standard were noted, particularly in areas where recruitment of qualified professionals is a challenge. In some jurisdictions, public health nutrition roles extend beyond that of regulated nutrition professionals (e.g. lay professionals, public health nurses, nutrition assistants, and trained paid or volunteer community health representatives) to help meet capacity requirements. Within one jurisdiction, the provincial Health Promotion and Protection Act legislates that public health nutritionists must be Masters trained in Canada and be registered dietitians. In addition, in several jurisdictions, membership (or eligibility for membership) in Dietitians of Canada, the professional association representing dietitians, was stated as a requirement.

Many jurisdictions state a preference for further postgraduate education, most commonly Masters degree preparation (i.e. community nutrition, public health, health, etc.), for public health nutrition professionals to fulfill current and desired roles outlined above. The pool of eligible candidates, however, is limited by their seemingly limited numbers. In fact, in a few jurisdictions, challenges or concerns related to the ability to recruit qualified individuals was stated as the reason for not having a Masters degree requirement.

The completion of graduate programs in areas related to public health nutrition was credited as providing professionals with enhanced critical thinking and research skills and enhanced capacities in program planning and evaluation and the public health functions, specifically, population health assessment, health surveillance, and disease and injury prevention. In addition, while very few in numbers across the country, public health sponsored internship or residency programs provide those interested in a career within public health greater opportunities for experiential learning within a public health setting.

In jurisdictions where public health or community dietitian positions exist, a Masters degree is not required as a pre-employment qualification. One respondent actually noted that within her jurisdiction, the roles performed by public health dietitians and public health nutritionists were essentially the same; the only difference being the compensation scale for respective professionals.

Experience in public and community health is required and/or preferred in many jurisdictions. A range of one to over five years of experience (community-related or not) was cited as a goal, however, again, with recruiting challenges related to capacity and geography, it is a goal that can not always be met. Several respondents stated that it takes

at least a two year employer investment to orient, prepare and support individuals with no or limited public health experience.

Several respondents explicitly stated that entry-level dietitians do not have the knowledge, skills and experience required for public health nutrition practice. This inadequate knowledge, skill and experience-base was largely attributed to insufficient public health-related content in undergraduate and internship programs.

A few respondents questioned the need for the regulated health professional registration/licensure component of 'standard' public health nutrition qualifications, particularly when individual counseling was not a primary role. Given the breadth, scope and complexity of public health nutrition practice, a few respondents challenged the current pre-service training which is largely based on a biomedical model and advocated for enhanced undergraduate, graduate, and post-graduate training in social, behavioral, and environmental sciences.

Retaining public health nutrition professionals was stated as a challenge by a few respondents, specifically when individuals did not have adequate public health preparation prior to employment. Related to this point, as a result of recruiting challenges, remote/northern communities are often considered or treated as training 'posts' for many entry-level health professionals, a reality that several respondents lamented given the potential impacts for communities.

Related to qualifications and credentials, one respondent reported that within the context of health human resource discussions, Deputy Ministers of Health expressed concerns about over-credentialing and increasing requirements for entry into practice for health professionals. The same respondent reinforced the need for a system within which positions exist for public health nutrition professionals working at multiple levels and having different roles and qualifications. The range of roles cited included program implementation to policy design to practice based research within public health settings.

Ongoing professional development and practical training was stated as necessary by numerous respondents. Participation in professional development opportunities and demonstration of continuing competence is required in most jurisdictions to maintain licensure with the provincial dietetic regulatory body. Enhanced, flexible and accessible opportunities to support continuous learning in areas relevant to public health nutrition practice were stated as a desire by many. Specific areas for enhanced training were noted, consistent with preferred future roles of public health nutrition professionals outlined above. A respondent from one jurisdiction noted that given the role variation within public health nutrition practice, differences in specific training and qualifications may be required.

## **Relationship to Other Team Members**

Common terms used to describe the relationship of public health nutrition professionals to other public health team members and personnel included the following:

- collaborator
- respected member of multi- and inter- disciplinary team and intersectoral groups
- consultant (sometimes referred to as 'expert' consultant)
- leader within organization
- coordinator within organization and with partners external to public health
- educator

Related to multi- and inter-disciplinary teams, the value of interdisciplinary training within undergraduate and graduate programs was highlighted by several respondents as a means of fostering positive working relationships, respect, and shared understanding of practice perspectives.

Public health nutrition professionals' roles as consultant and collaborator both within and external to their employing organization was cited by a number of respondents as being a necessity as a result of capacity. These roles were also identified as a result of public health nutrition professionals' strengths in educating others and having skills in capacity building, community mobilization, and partnership building, program planning and evaluation and other related areas.

Several respondents expressed that public health nutrition professionals are increasingly being acknowledged by other public health team members and partners for their enhanced knowledge and skills related to public health functions, population health and community development approaches. Very positive working relationships among public health nutrition professionals and other team members were noted by virtually all respondents. Several respondents, however, acknowledged a tension related to the reality that sometimes at the frontline level, nutrition is seen as a topic area that can be addressed by all health professionals.

In terms of reporting relationships, most public health nutrition professionals report to either public health managers who do not have a nutrition background or dietitians as managers, many of whom do not have a public health background.

## **Unique Knowledge, Skills and Abilities of Public Health Nutrition Professionals**

Making the distinction between the knowledge, skills and attributes required by entry versus advanced level public health nutrition professionals was a challenge for many respondents. Respondents indicated that these types of practice distinctions are not made in the majority of jurisdictions (i.e. all are entry-level or all are advanced-level).

Generally, when differences were highlighted they related to advanced-level practitioners having enhanced, in-depth knowledge, skills and experience (in the same areas as entry-

level practitioners) or primarily using different strategies in practice (i.e. systems, policy and population focused versus direct service to individuals and groups). Expanded knowledge and skills in all areas (reflecting enhanced proficiency), and specifically, in system-level approaches (including policy influence), relationship and partnership building, various aspects of management, leadership, and research and epidemiology were often noted for advanced-level practitioners.

It was assumed or implied and explicitly stated by several respondents that the competencies required by public health nutrition professionals are "over and above" the Dietitians of Canada entry level competencies for dietetic practice. In addition to knowledge and skill-type competencies, being a licensed nutrition professional requires adherence to professional, ethical, and legislated responsibilities, in some cases. Having experience working with community or in a community setting was identified as an asset or pre-requisite for entry-level positions by numerous respondents. Interestingly, public health nutrition professionals' unique and in-depth knowledge of the science of human nutrition and knowledge of food and food systems was only explicitly articulated by a few respondents within the context of this question.

Within several jurisdictions, specific role and function statements and competency sets have been developed for public health nutrition professionals. When this was the case, respondents referred to these reports when providing their responses.

When the distinction could be made, knowledge, skills and abilities required by *entry-level* public health nutrition professionals included the following:

- individual assessment and counseling; experience in clinical nutrition
- situational assessment skills (i.e. inclusive of needs, assets and capacities)
- knowledge of public health, health promotion and population health principles (use of multiple strategies and approaches); determinants of health
- in-depth nutrition knowledge (including social and behavioral aspects) and the ability to translate the theory and science so that it can be understood by a variety of audiences
- basic research methods skills and the ability to interpret and critique results,
- oral and written communication skills (including computer/information technology and social marketing skills)
- organization
- facilitation and conflict resolution
- collaborative practice; being an effective team member
- working with community
- ability to set priorities
- knowledge of adult education principles and behavior change theories; public and professional education
- ability to identify and define problems and assets within determinants of health context (identification of target populations)
- project and program planning/adaptation, implementation and evaluation
- policy and standard setting processes

- identify key community partners and develop relationships
- proposal writing
- media skills
- advocacy

Common knowledge, skills and abilities reported by respondents for *advanced-level* public health nutrition professionals, again when the distinction could be made, included:

- community/population nutrition assessment, monitoring and surveillance
- advanced knowledge of epidemiology and nutritional epidemiology
- enhanced leadership
- enhanced management (including human resources, budget and project management)
- strategic analysis
- advanced writing and presentation
- relationship management
- larger systems changes/thinking; enhanced systems knowledge and ability to influence
- greater knowledge and skill related to policy development and influence processes
- work on larger projects and initiatives
- human resources
- enhanced capacities related to public health functions
- enhanced capacities related to ethics and ethical partnerships and sponsorships
- proactive identification of issues and issues management
- leadership within practice-based research initiatives (ability to identify potential for research)
- in-depth knowledge of and working relationship with community and community partners
- advanced skills in relationship building and maintenance
- enhanced ability to mentor others

In addition and in support of those identified above, the knowledge, skills and abilities, and in some cases, attributes, held by public health nutrition professionals, included:

- facilitation
- community development
- partnerships and collaboration
- conflict resolution
- policy development, influence and advocacy approaches
- systems knowledge
- group theory
- adult learning principles
- openness to learning and change
- knowledge of where to get, use and critically evaluate information/evidence
- public health, population health and health promotion theory and approaches
- knowledge of and skills in working with diverse communities

- strategic thinking and priority setting
- confidence (ability to make decisions based on information available)
- assessment skills
- program and project planning, implementation and evaluation
- oral and written communication skills (compelling, confident, clear; including use of technology)

When asked to identify what is unique about public health nutrition practice compared to other fields of dietetic practice, respondents generally highlighted the differences between clinical and public health nutrition practice. *The major differences between public health nutrition practice and those of other fields of dietetic practice included the following:*

- work with groups, communities and populations (versus individuals); ability to adapt to constantly changing environments and situations
- use of multiple strategies with multiple partners, including community
- models of practice are population health/determinants of health, health promotion, community development and public health (versus biomedical, predominantly)
- ongoing, sustainable initiatives
- ability to interpret and communicate complex nutrition information to broad and diverse audiences
- influencing, facilitating and supportive role (compared to having role that has more control on the outcome)
- health promotion and disease prevention/wellness focused (work with generally healthy populations)
- community and population focus for assessment and planning functions
- broad knowledge of systems and systems orientation (e.g. public policy, creating supportive environments)

One respondent noted that perhaps greater similarities between food service management (versus clinical nutrition) and public health nutrition exist in terms of project and communication management functions, among others. Similarities and differences in practice are obviously contingent on the organization, structure and function of public health and health system organizations. A number of respondents explicitly reinforced the need for, and value of, all areas of practice within dietetics and cautioned against setting public health nutrition practice up as being superior.

Expertise in the science of food and nutrition and associated systems (subject focus) and long-standing use of population health and community development approaches were highlighted as the major factors which distinguish public health nutrition practice from the practice of other public health disciplines. Similar to a perspective stated above, one respondent cautioned that efforts to identifying the unique competencies of different public health professionals could be divisive versus supporting the enhanced capacity of the overall public health system. Numerous respondents noted that public health nutrition professionals are valued by other public health colleagues for their unique and expert knowledge, but also for their broad public health competencies.

Several respondents noted that public health nutrition professionals have more in common with other public health professionals versus dietitians in other fields from a philosophy and practice perspective. In the words of one respondent, "(public health nutrition practice and the practice of other public health disciplines) are intimately connected, but each has its own area of expertise". Related to commonalities in practice, one respondent cautioned that the development of competencies for public health nutrition professionals could be seen as divisive by other public health professionals. Several respondents noted that while practice similarities exist, public health nurses, in particular, work predominantly with individuals and families, whereas, groups, communities and populations are the 'clients' of public health nutrition professionals. The impact on the practice of public health nutrition professionals (i.e. working with and across teams, consultant role, communication through intermediaries, community and population focus, etc.), being often fewer in numbers within a public health organization, was identified by a few respondents.

### **Role of Competencies for Future Practice**

Common aspects of a preferred vision for public health nutrition practice in the next five to ten years included the following:

- increased/adequate number of public health nutrition positions to respond to increased demand and to have broad impact with a variety of groups and populations (direct service, population-based and broader public health, and policy roles); increased visibility
- increased number of public health nutrition professionals as leaders in management and research roles
- consistent use of systems, policy, population health, participatory and community development approaches (continued expansion of role)
- enhanced support for public health nutrition professionals to allow for full implementation of role (e.g. clerical/administrative, professional development and continuing education, program funding, etc.); organizational and systems support to work where greatest potential for change exists
- increased access to public health nutrition professionals having expertise in epidemiology and public health-related research; enhanced nutrition-related monitoring and surveillance
- increased number of public health nutrition researchers and increased funding for research opportunities to demonstrate efficacy and effectiveness of public health nutrition practice and related interventions; enhanced evidence-based practice; enhanced connections with academic institutions
- increased role for public health nutrition professionals within multi-disciplinary teams and integration of nutrition within public health programs and messages
- development of competencies (including standards and practice guidelines) for public health nutrition professionals and development of processes that are flexible and accessible to demonstrate the same; position uniqueness, specialty



- enhanced communication skills using innovative technologies
- changes within pre-service and professional development programs to reflect required competencies of public health nutrition professionals and health system trends (e.g. evidence-based practice); increased number of qualified public health nutrition professionals

In addition, a few respondents expressed the desire for a greater number of opportunities for entry-level public health nutrition professionals. Entry-level public health nutrition professionals were identified as having great potential and requiring nurturing and mentoring to stay engaged, motivated and supported within public health practice.

In addition to some of the responses provided above, according to respondents, public health nutrition practice needs to change in the following ways to support their expressed vision:

- provide/facilitate opportunities for public health nutrition professionals to explore expanded roles (i.e. reduce constraints imposed by existing positions; expand beyond direct service)
- empower and encourage greater number of public health nutrition professionals to assume decision-making roles within organizations
- create awareness and understanding that public health nutrition professionals have the required knowledge, skills, and abilities to perform in broader public health roles
- support broad changes and investment required within public health system overall (across levels of government); public health nutrition will not flourish without this investment
- acknowledge and celebrate the variety of roles among public health nutrition professionals (i.e. those who predominantly 'do' and those who 'plan')
- facilitate changes within academic institutions, internships, licensing organizations and professional organizations to achieve vision; and clarify roles of each related to the same
- educate employers and decision-makers related to envisioned role of public health nutrition professionals

The development of national competencies for public health nutrition professionals will support the actual and envisioned role in a standardized, legitimate and documented way that can be used by professionals themselves, academic institutions (curriculum design and accreditation), internship/practicum programs, health system organizations and employers (position descriptions, recruitment, professional development requirements), among others, to support enhanced public health practice. In the words of one respondent, competencies for public health nutrition professionals will "... allow for dialogues related to what is a public health nutritionist, what do they do, could they do, and what are they best-suited to do".

In addition, one respondent stated that competencies will support, legitimize and encourage public health nutrition professionals' exploration of non-traditional roles, a trend which has already begun. Numerous respondents stated that competencies for

public health nutrition professionals will facilitate needed transformations within undergraduate education, internship programs, and the current entry-level competencies for dietitians to better reflect public health nutrition practice. While stating that competencies could be valuable, particularly in jurisdictions where there currently is not great public health nutrition capacity, two respondents questioned the power of competencies to facilitate a dramatic shift in practice.

As previously noted, several respondents encouraged that the competencies, once developed, reflect and be inclusive of various types of practice within the public health nutrition field. In contrast, a few respondents indicated that the development of competencies will require role distinction between nutrition professionals practicing in community-based versus formal, public health organizations. A few respondents expressed that coming to an agreement on key competencies of public health nutrition professionals will be both an opportunity and a challenge given the breadth, scope and variety within the practice area.

### **Other Considerations**

Respondents provided the following additional considerations for the future development of public health nutrition competencies:

- reinforcement of the pan-Canadian/national orientation of the current public health nutrition competency initiative
- position work within the broad context of public health, public health core competencies, competencies developed for other public health professionals and those existing for dietitians; don't develop in isolation
- ensure application of competencies within training contexts (broadly defined)
- include both individual and organization level competencies within competency set
- include culture-related competencies
- include competencies related to financial and other management aspects
- include competencies related to systems focus, population health and leadership
- include competencies related to understanding the social, cultural, spiritual, environmental, agricultural and political influences on food, nutrition and health
- include competencies related to influencing behavior change among groups and populations
- include competencies related to advocacy skills and a working knowledge of government, political and food systems
- consider including competencies which reflect desired personality characteristics of public health nutrition professionals (i.e. passionate, commitment to community, confident, etc.)
- include competencies related to the use of technology
- develop competencies using future focus; be accommodating of changing roles
- competency comes through practice; question whether a full set of competencies can be demonstrated following academic studies

- impact of changing roles of government
- build on existing public health nutrition competency work
- clarify purpose and process of competency use, who will administer them, and how they relate to other dietetic practice competencies
- include all related formal and informal professional associations and representatives from academic groups in the development and implementation of competencies
- develop mechanisms to monitor use/implementation of competencies, once developed
- pilot application of competencies in various public health settings and develop and implement an evaluation framework which includes an assessment of the interdisciplinary aspects of the competency set
- consider use of a competency model which articulates levels of proficiency for different roles within the public health nutrition profession
- caution between being inclusive and ending up with generic competencies
- important to highlight what is unique about public health nutrition practice but also identify areas of cross-over with others which will assist with broad gap identification and facilitate multi-disciplinary public health action
- consider soliciting input from public health managers, decision-makers, professionals, partners and clients of public health nutrition professionals to inform competencies
- build on existing competency assessment processes which could be put to more systematic use beyond licensing requirements
- include individual and organization-level competencies
- consider a variety of equivalency options for the acquisition of competencies (e.g. via formal graduate-level education, employment job experience)

## Conclusions

This report summarizes the perspectives of twenty-nine key informants representing various practice areas of the public health nutrition field related to nutrition practice issues; the structure/organization of public health nutrition practice in Canada; roles and functions of nutrition professionals; and issues and challenges facing the profession.

While perspectives varied, general agreement existed in the following areas of interest/questioning: definition of (descriptors for) public health nutrition, current and future roles of public health nutrition professionals, required competencies (knowledge, skills and abilities) and the role of competencies to support public health nutrition practice.

Differences in perspective were noted in the following areas:

- the role of direct service individual approaches (e.g. counseling, group education, etc.) within public health nutrition practice,

- the preference or requirement for graduate degree preparation,
- the ability of (even enhanced) undergraduate education and internship programs to prepare dietitians for public health practice, and
- the role potential for entry-level dietetic practitioners within public health (i.e. those without graduate degree preparation or relevant experience).

Building on the areas of agreement noted above and incorporating the considerations suggested by respondents, the eventual development of competencies for public health nutrition professionals will need to take into account and further analyze these areas of discrepancies as part of a comprehensive and inclusive process.

## References

1. Her Majesty the Queen in Right of Canada (2000). *A Strong tradition of Collaboration: The Federal/Provincial/Territorial Group on Nutrition*. Ottawa: Health Canada.

# Appendix A

## **Pan-Canadian Advisory Committee – Public Health Nutrition Competencies -**

- **Jane Bellman (Chair of Advisory Committee)** Public Health Dietitian, Wellington-Dufferin-Guelph Public Health, Guelph, ON
- **Ann Fox** Program Director, Community Nutrition, University of Toronto, Toronto, ON
- **Mary Lou Gignac** Registrar and Executive Director, The College of Dietitians of Ontario, Toronto, ON
- **Marie Traynor** Internship Coordinator/Research Associate, Kingston, Frontenac and Lennox & Addington Public Health, Public Health Research, Education and Development Program, Kingston, ON
- **Michelle Amero** Coordinator, Healthy Eating, Nova Scotia Department of Health Promotion and Protection, Halifax, NS
- **Tara Brown** Consultant, Nutrition Promotion, Toronto Public Health, Toronto, ON
- **Cindy Scythes** Public Health Nutritionist, York Region Health Services, Newmarket, ON
- **Sheryl Bates Dancho** Community Nutrition Specialist, Winnipeg Regional Health Authority, Winnipeg, MB
- **Caroline McAuley** Community Nutritionist, East Central Health, Vermilion, AB
- **Pam Kheong** Community Nutritionist, Fraser Health Authority, Public Health Nutrition Program/South, Delta, BC

### **Corresponding members**

- **Mary-Jo Makarchuk**, Toronto Public Health, Toronto, ON
- **Marlene Wyatt**, Director of Professional Standards, Dietitians of Canada, Ottawa, ON

### **Ex-Officio (non-voting):**

- **Janice Macdonald** (DC Contract Manager) Dietitians of Canada, Vancouver, BC
- **Lynne Foley** (Public Health Agency of Canada liaison) Public Health Practice and Regional Operations, Workforce Development Division, Skills Enhancement for Public Health Core Competencies Initiative, Winnipeg, MB
- **Cathy Chenhall** (Contractor) Halifax, Nova Scotia



## Appendix B

### University of Toronto

Department of Nutritional Sciences

University of Toronto

150 College Street, Room 307, Toronto, ON M5S 3E2

### Information Sheet and Consent Form

#### **Title of research project:**

“Gathering stakeholder input in the development of public health nutrition practice competencies”

#### **Investigators:**

Ann Fox\*, MHS, PhD, RD, Director Community Nutrition Program, University of Toronto, telephone 416-978-3617, [ann.fox@utoronto.ca](mailto:ann.fox@utoronto.ca)

Cathy Chenhall\*, MHS, PDt, Project Consultant, telephone 902-463-7831

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Jane Bellman, Community Dietitian, Wellington-Dufferin-Guelph Public Health, ON, Ph: (519) 821-2370 x2247, [Jane.Bellman@wdghu.org](mailto:Jane.Bellman@wdghu.org)

Janice Macdonald, DC Contract Manager, Dietitians of Canada, Vancouver, BC, Ph: 604 736-3732, Fax: 604 736-3736 [jmacdonald@dietitians.ca](mailto:jmacdonald@dietitians.ca)

\*Lead project contacts.

#### **Sponsors:**

Dietitians of Canada (DC), Public Health Agency of Canada (PHAC)

#### **Background & Purpose of Research:**

Addressing complex public health issues in Canada requires the collaboration of highly trained groups of interdisciplinary health professionals. As part of an effort to enhance and promote public health expertise among the health disciplines, the Public Health Agency of Canada (PHAC), through Dietitians of Canada, is supporting the development of professional practice competencies for registered dietitians working in public health settings/organizations. The purpose of this research project is to gather input from public health nutrition professionals across Canada in order to inform the development of these competencies.

#### **Invitation to Participate:**

You are invited to participate in an individual interview where you will be asked to comment on your views about public health nutrition practice. Your experience and

perspectives as a public health nutrition professional will provide valuable insight into the development of professional practice competencies.

**Eligibility:**

To participate in this study, you must be a registered dietitian practicing in a public health setting or organization in Canada.

**Procedures:**

The interview will last approximately one hour and will be scheduled for a time convenient for you. The interview will be conducted on the telephone and will be audio-taped to assist with gathering information. The interview will also be transcribed verbatim. Digital recordings will be stored with study documents in a locked file and destroyed one year after completion of the study.

**Voluntary Participation & Early Withdrawal:**

You are free to withdraw from the study at any time before or during the interview. You may also request that the interviewer turn off the tape recorder at any time during the interview.

**Risks/Benefits:**

No risks associated with participation in the study are anticipated. You may benefit in the long term by helping to shape the development of public health nutrition practice competencies and guidelines.

**Privacy & Confidentiality:**

Only the interviewer will know your identity and this will be kept confidential at all times. Numeric identifiers will be assigned to all respondents in all interview records so that participants' names are not used in any study documents.

**Publication of research findings:**

Aggregate findings of the interviews may be published in project reports and professional peer reviewed journals. Quotations from interview participants may be used however individual participants will not be identified.

**Compensation:**

No compensation is provided. Your participation is appreciated.

**Contact person:**

If you have questions about your rights as a research participant, please contact Jill Parsons, Health Sciences Ethics Review Officer, Ethics Review Office, University of Toronto, at telephone 416-946-5806 or by email: [jc.parsons@utoronto.ca](mailto:jc.parsons@utoronto.ca).

**Dissemination of Findings:**

Findings will be reported to the Pan-Canadian project advisory committee in the fall of 2006 and study participants may request a copy of this report.

Please check below your willingness to have your interview recorded.

I agree to have the study interview with me audio-taped. (Please check one)

Yes\_\_\_

No\_\_\_

**Copy of consent for participant:**

You are being given a copy of this informed consent to keep for your records.

**Signature:**

**Printed Name:**

**Date:**

Please return by fax or mail to:

Cathy Chenhall  
27 Guy Street, Dartmouth, NS B3A 2P4  
Fax: 902-463-0702



# Appendix C

## Interview Guide for Public Health Nutrition Competency Project

Thank you for agreeing to participate in a telephone interview to discuss your views on public health nutrition practice. The questions below will guide the interview. Please review these questions and consider your responses to them. Some questions might not be relevant to your practice. If you do not wish to answer any questions for any reason please indicate that during the interview. You are free to stop or end the interview at any time. Many thanks for your participation in this project.

### **1. Structure of Public Health (PH) nutrition services**

- 1.1 How are public health nutrition services organized in your province/territory?
- 1.2 What standards/guidelines/policies direct practice in your province/territory/community/organization

### **2. Roles and Functions of PH nutrition professionals**

- 2.1 How would you describe PH nutrition?
- 2.2 What are the major roles of PH nutrition professionals?
- 2.3 How do you think PH nutrition roles and functions will change in the years ahead?
- 2.4 What training and qualifications are required to perform these roles?

### **3. Relationship to other team members**

- 3.1 Describe the relationship of PH nutrition professionals to other public health team members and personnel.

### **4. Unique knowledge, skills and abilities of PH nutrition professionals**

- 4.1 What knowledge/skills/attributes are necessary to work as a PH nutrition professional at...
  - a. entry level practice
  - b. an advanced level of practice
- 4.2 What is unique about PH nutrition practice compared to...
  - a. other fields of dietetic practice (eg clinical, food service)
  - b. the practice of other public health disciplines (eg nursing, epidemiology)

**5. Role of competencies for future practice**

- 5.1 Describe your preferred vision for public health nutrition practice in the next five to ten years.
- 5.2 How does nutrition practice need to change to achieve that vision?
- 5.3 How can the development of public health nutrition competencies support that vision?

**6. Other Considerations:**

- 6.1 What other considerations should be taken into account when developing public health nutrition competencies?
- 6.2 What would you like to see included/addressed in the PH nutrition competencies?

Thank you