ONTARIO SOCIETY OF NUTRITION PROFESSIONALS IN PUBLIC HEALTH

LA SOCIÉTÉ ONTARIENNE DES PROFESSIONEL(LE)S DE NUTRITION EN SANTÉ PUBLIQUE

Public Health Nutrition...
An Investment in the Future

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The original "Public Health Nutrition: An Investment in the Future" (1998), contained Qualifications of Public Health Nutritionists (Appendix 1) in which Regulation 566 of the Health Protection and Promotion Act was included. The Act was amended in 2000. This updated version (R.R.O. 1990, Regulation 566, Amended to O. Reg. 630/00) is included in the document to reflect the most current standards and requirements.

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Executive Summary

Public health is the **only** part of the health system that affects all Ontarians every day. Yet in 1994/95, 1.5% of Ontario's health budget was spent on public health (1).

Public health professionals are mandated to assess the health needs of their communities, develop programs and policies that address priority needs, and assure that all people have access to appropriate and effective services (3). Public health nutrition professionals are essential to health units, bringing appropriate skills, and a unique perspective, expertise and training. They are the only Registered Dietitians who have the mandate to serve the entire community.

> *Public health nutrition professionals understand nutrition, an ever-changing and complex science. As educators and communicators, they make nutrition easy to understand and relevant to people's lives.*
>
> *Public health nutrition professionals understand food – its composition, preparation, storage, and safety, and apply this understanding in their education programs and resources.*
>
> *Public health nutrition professionals understand food laws, labelling, and technology, and accurately interpret these to the public.*
>
> *Public health nutrition professionals understand how food habits are formed and changed and can help people optimize their eating behaviour.*

Public health nutrition professionals bring many strengths to health units. By using their skills, health units can better meet the requirements of provincially mandated programs, and maximize health outcomes in their communities.

With municipal funding, health units may have more flexibility to address local needs, but they are still required to deliver provincially mandated programs. The Ministry of Health's 1997 Mandatory Health Programs and Services Guidelines identify minimum requirements, which each health unit must achieve. There are 3 areas of focus – chronic disease prevention, infectious disease control, and family health. Priority is given to programs and services which have a major impact on population health, and which focus on prevention (6).

Public health nutrition programs build skills, which enable people to make healthy food choices, to live healthier and longer lives. Healthy eating promotes optimum growth and

development, and decreases morbidity and mortality from chronic disease, reducing health care costs and lost productivity.

Chronic disease is largely preventable. Diet affects three crucial heart disease risks – blood cholesterol, blood pressure, and body weight (13). Diet is also responsible for about 20% of all fatal cancers (14). It is the second leading modifiable cause of cancer (15), and is a risk factor in breast, bowel, and prostate cancers (14).

Many factors determine what consumers choose to eat. Consumers want to make healthier food choices to prevent chronic disease and its costly treatment. Current diets fall short of Canadian nutrition recommendations. People are rushed for time, and challenged by confusing and conflicting nutrition information. They're looking for help, and consider Registered Dietitians as trusted sources of information. Public health nutrition programs can influence these factors so that consumers can make healthier food choices to improve their health.

Canada's national nutrition plan *Nutrition for Health: An Agenda for Action* provides a model to address nutrition issues in communities nationwide (7). Four strategic directions are outlined as national priorities:

- To reinforce healthy eating practices
- To support nutritionally vulnerable populations
- To enhance the availability of foods that support healthy eating
- To support nutrition research (7).

The plan also recommends a number of key actions to achieve the strategic directions. These actions clearly support the types of programs and services public health nutrition professionals provide.

Public health nutrition programs use three main approaches - education, environmental support, and policy development. Education helps people to develop the skills they need to make healthier food choices. Environmental support activities make healthy foods more available and healthy eating socially acceptable in places such as restaurants and workplaces. Policy development with specific sectors such as schools helps to ensure that available foods are healthy (30).

Public health nutrition programs are effective. Public health nutrition professionals are essential to health units, bringing appropriate skills, and a unique perspective.

Nutrition is a complex issue. Unlike smoking cessation, the goal for dietary change is not a single act. Dietary change requires people to continue eating but to adapt what and how they eat. It involves a series of changes, not only in eating, but also in food shopping and preparation (37). To demonstrate positive outcomes, intervention programs must be of sufficient duration and intensity. For example, comprehensive heart health programs in workplaces must be sustained for a minimum of one year to bring about risk reduction, and 3-5 years to demonstrate cost-effectiveness (39). At this time, only a few public health nutrition programs have the long-term financial material, and human resources for the necessary sustained involvement. For these reasons, published data on the effectiveness of nutrition programs and services is limited. In 1997, the number of personnel involved in Nutrition Promotion programs was less than 3% of the total number of public health professionals in Ontario. The Nutrition Promotion budget was just over $10.5 million, costing Ontario taxpayers $0.97 per capita (41).

The Ministry of Health also funds public health nutrition professionals in 6 teaching health units. They evaluate public health nutrition programs, research public health nutrition issues, and educate future public health professionals. With their added education and training, they are a valuable asset to all of the health units. *Their provincial funding ends in March 1999.*

The Ontario Society of Nutrition Professionals in Public Health recommends that the impact of healthy eating, nutrition programs and public health nutrition professionals on the health of communities be acknowledged and supported in the following ways:

1. Funding be allocated to enhance the number of public health nutrition professionals in Ontario health units in order that they can design and deliver efficient and effective nutrition programs and services in their communities as outlined in *Mandatory Health Programs and Services Guidelines.*

2. Municipalities endorse the philosophies and support public health nutrition professionals in taking a leadership role to achieve the strategic directions in Canada's national nutrition plan*, Nutrition for Health: An Agenda for Action.*

3. Municipalities advocate for and support public health nutrition professionals employed in Teaching Health Units, to continue to provide leadership in evaluating best practices and to continue to determine cost-effectiveness in

nutrition programming, in collaboration with university nutrition program personnel.

Public Health Addresses Changing Needs

Change is the underlying theme in Ontario today. Public health funding and programs are changing. Social, economic, and political changes are affecting the health needs of our communities, and the ability of health units to meet those needs.

Good Value

Public health is one of the best fiscal values in the health system today. In 1994/95, 1.5% of Ontario's health budget was spent on public health (1). Yet public health is the only part of the health system that affects all Ontarians every day, from the food and water we consume, to the safety of the environment around us.

Public health is a comprehensive system which includes four essential elements - health promotion, disease prevention, health protection, and healthy public policy (2). Public health professionals assess the health needs of their communities, develop programs and policies that address priority needs, and assure that all people have access to appropriate and effective services (3).

Funding and Program Changes

On January 1, 1998, municipalities assumed 100% funding of the 43 health units in Ontario. The total provincial transfer to municipalities was $ 225 million (4). This is less than the total operating budget of some hospitals; for example, the 1996/97 budget of the London Health Science Centre was $ 392 million (5).

With municipal funding, health units may have more flexibility in addressing local needs, but they are also required to deliver provincially mandated programs. The Ministry of Health's 1997 *Mandatory Health Programs and Services Guidelines* identify minimum requirements which each health unit must achieve. There are 3 areas of focus – chronic disease prevention, infectious disease control, and family health. Priority is given to programs and services which have a major impact on population health, and which focus on prevention (6).

Social, Economic and Political Changes

Our socioeconomic environment is changing. People are aging, cultural diversity is increasing, and family structure is changing (7,8,9). Only 1 in 10 families have a stay-at-home spouse. Other adults care for almost 3 out of 4 preschool children while their parents work or go to school (7). The economic climate is suffering from new pressures. Unemployment and reduced income affect many people. In 1996, the poverty rate for all Canadians was almost 20%, with over 5 million people living in poverty. The poverty rate, for single-parent mothers with children under 18, was over 60% (10).

The political climate is also changing. Deficit reduction, balancing the budget, tax cuts, and a streamlined government are current priorities which are reflected in today's reform of social and health programs (11). These reforms will have a significant health impact on the health of our communities. For example, reductions in social assistance allowances are affecting the amount of money people have left to spend on food.

Public health is a good value. It can be an even better value if health units have the resources and skills they need to deliver more comprehensive programs and services that are responsive to the changing health needs of their communities.

Healthy Eating Reduces Health Care Costs

Public health nutrition programs enable people to make healthy food choices, to live healthier and longer lives. Healthy eating promotes healthy growth and development, and decreases morbidity and mortality from chronic disease, reducing health care costs and lost productivity.

Healthy Growth and Development

Food is essential to life. The impact of good nutrition begins before birth. Healthy eating helps children grow and develop to their potential, and instills food attitudes and practices that last a lifetime. A healthy diet helps children learn, improves their reaction to stress, and increases their resistance to illness. Healthy eating "feeds our future and secures our health" (12).

Chronic Disease Prevention

By adulthood, a lifetime of poor nutrition can result in the onset of chronic diseases. Chronic disease is pervasive, and has long term and costly repercussions. Its toll is measured not only in death but in disability, reduced quality of life, health care costs, and lost productivity.

Heart disease and cancer are responsible for 1 in every 2 deaths in Ontario. Ontario spends $ 2 billion each year treating heart disease. When heart disease keeps people off work, this costs another $ 4.5 billion a year (13, 14). Cancer is also expensive to treat, with Ontario spending about $ 1 billion annually (14).

Chronic disease is preventable, and the food we eat has a powerful influence. Diet affects 3 crucial heart disease risks – blood cholesterol, blood pressure, and body weight (13). Diet is also responsible for about 20% of all fatal cancers (14). It is the second leading modifiable cause of cancer (15), and is a risk factor in breast, bowel, and prostate cancers (14).

Healthy Eating Saves Money

When Sabry calculated the potential savings from improved nutrition in Canada in 1975, he estimated that $ 2.5 billion per year could be saved on the cost of hospitalization,

medical-dental care, loss of productivity due to premature death, and absenteeism due to nutrition-related diseases and disorders (16). In 1994, Montreal researchers estimated that nation-wide compliance with a diet containing 10% saturated fat, and 300 milligrams of cholesterol, could delay the onset of heart disease, resulting in more than 400,000 person-years of life saved, mostly among men aged 30 – 59 years (17).

Health Canada is currently collecting and analyzing the potential cost savings associated with healthier eating. Their results are not yet available (18). However, a similar analysis was completed for increased physical activity. In its 1996 report, the Conference Board of Canada estimated that even a 1% increase in the number of people who are physically active could save $ 10 million in treatment costs for heart disease, over $ 400 million for colon cancer, and almost $ 900 million for diabetes (19). The economic impact of healthier food choices could be substantial.

Public health nutrition programs contribute to the health of individuals and the health and economy of communities. They can make an even bigger contribution if health units have the resources they need to enhance their health promotion and disease prevention efforts.

Consumers Want to Make Healthier Food Choices

More consumers want to make healthier food choices to prevent chronic disease and its costly treatment. Current diets fall short of Canadian nutrition recommendations. People are rushed for time, and challenged by confusing and conflicting nutrition information. They're looking for help, and consider Registered Dietitians as trusted sources of information.

Nutrition Recommendations

The Nutrition Recommendations for Canadians provide the scientific rationale that nutrition plays a significant role in chronic disease prevention. Consumers are advised to choose a diet containing no more than 30% of its calories as fat, and at least 55% of its calories from carbohydrates (20). As well, 25 – 30 grams of fibre are recommended each day. *Canada's Food Guide to Healthy Eating* encourages consumers to meet these recommendations by eating more grain products, fruits, and vegetables (21). Fruits and vegetables are also rich in plant chemicals, and offer some protection against many types of cancer (22). A Body Mass Index of 20 – 25, considered a healthy range for adults 20 – 64 years, is an added goal.

Consumer Food Choices

Many Canadians feel that they're not eating as well as they should. They recognize the importance of healthy eating but find it a challenge. More food choices are available, inside and outside the home. Eating on the run is a fact of life. A vast amount of nutrition information clouds issues, and conflicting information impedes action. Consumers don't plan before they shop or prepare meals, and that affects their food choices. They're looking for new ideas and tools that can make healthy eating easier (25). The 1990 Ontario Health Survey revealed that consumers could make healthier choices:

- more than 85% of Ontarians ate more than the recommended amounts of fat
- just 21% met the recommendations for carbohydrates
- only one man in four ate more than 25 grams of fibre daily
- one woman in five ate more than 25 grams of fibre daily
- over 50% of Ontarians ate less than the 5 servings of fruits and vegetables recommended as a daily minimum
- more than one half of the males and one third of the females surveyed had a BMI above the healthy weight range (23,24)

Nutrition Information and Education

Consumers trust Registered Dietitians as sources of nutrition information, unbiased by industry and other self-interest groups. This trust is growing. In a survey completed before the 1997 National Nutrition Month campaign, dietitians were chosen by just over 60% of consumers as a desired source of information (26). Dietitians were ranked as the most credible source of information in a survey conducted after the 1998 campaign, with almost 90% rating them as very or somewhat reliable sources of nutrition advice (27).

One in 3 Canadians say they have improved their eating habits in the past year. In the 1997 *Tracking Nutrition Trends* report, they claimed to be eating more vegetables and fruit, and cutting back on fat. While many considered nutrition to be extremely or very important, 2/3 did not rate themselves as particularly knowledgeable about nutrition (28).

In a 1998 report, the U.S. Department of Agriculture's Economic Research Service cites information and knowledge as the keys to better diets. Women, as well as people with higher incomes or education, tend to have healthier diets. This study revealed that such people may acquire more nutrition information and knowledge, which in turn, improves their diet quality. This finding supports the need for sustained and targeted nutrition education efforts (29).

Public health nutrition programs help consumers meet Canadian nutrition recommendations. They can be even more effective if health units have the resources and skills they need to enhance their nutrition information and education efforts.

Public Health Nutrition Programs are a Good Investment

Many factors determine what consumers choose to eat. Public health nutrition programs can influence these factors so that consumers can make healthier food choices that improve their health. Canada has a national nutrition plan, and public health nutrition professionals can be leaders in its implementation. While evaluation data are limited, nutrition services are making a difference in prenatal and heart health programs.

Individual and Environmental Influences

Food choices are not simply a matter of personal choice. Economic and social forces, together with factors related to the physical environment, influence what foods are available, and an individual's ability to make choices.

While access to nutrition information can improve diet quality, other environmental factors also influence food choices:

- food preparation skills
- income and personal buying power
- the settings in which people eat (e.g. home, school, workplace, restaurants)
- advertising, media and peers
- social and cultural values
- the composition of the food supply
- access to health, social, and community services (7).

Public health nutrition programs use 3 main approaches to influence these individual and environmental factors - education, environmental support, and policy development. Education helps people develop the skills they need to make healthier food choices. Environmental support activities make healthy foods more available, and healthy eating socially acceptable in places such as restaurants and workplaces. Policy development with specific sectors such as schools helps to ensure that available foods are healthy (30).

A National Nutrition Plan

Canada has a national nutrition plan. *Nutrition for Health: An Agenda for Action* provides a model to address nutrition issues in communities across the country. Widespread action is required by all sectors to address the prevalence of chronic disease, the quality of current diets, as well as inequities in nutritional well-being (7).

Four strategic directions are outlined as national priorities:

- reinforce healthy eating practices
- support nutritionally vulnerable populations
- enhance the availability of foods that support healthy eating
- support nutrition research (7).

The steering committee recommends a number of key actions to achieve these strategic directions such as maintaining nutrition services as part of comprehensive health services in both existing and evolving community-based services, emphasizing practical skill development in nutrition education programs for the public, and strengthening food and nutrition components of community programs and services for vulnerable groups (7). These actions clearly support the types of programs and services public health nutrition professionals provide.

Public health nutrition professionals participate in prenatal nutrition and heart health programs. Federal and provincial investment in these programs is growing because there is evidence that they are effective.

Prenatal Nutrition Programs

Low birth weight is the leading cause of infant death, and long-term disability. The cost of caring for a low birth weight baby is estimated to be $ 500 - $ 1,000 a day. The cost of caring for each low birth weight baby to the age of 2 could be $ 200,000 (31).

Prenatal nutrition programs like Toronto's Healthiest Babies Possible program, the Montreal Diet Dispensary (MDD), and the U.S. Special Supplementary Food Program for Women, Infants, and Children (WIC) are effective in reducing the risk of low birth weight, and avoiding the cost of medical care for high risk women. These programs provide individual nutrition assessment and counselling, food and vitamin supplements, social support, and referral to other health services.

1. The Healthiest Babies Possible program was implemented by the City of Toronto's Department of Public Health in 1979. The program is coordinated and delivered by public health nutrition professionals. The low birth weight rate of participating women was reduced from 11.2% in 1984 – 1986, to 5.9%, 10 years later (32). This is a savings of approximately $3 million.

2. In 1990, the Montreal Diet Dispensary program cost under $400 for each pregnant woman served. By reducing the rate of low birth weight by 50%, this program could save over $5 million in caring for the babies during the first year of life, and $45 million on their care after the first year of life (31).

3. The WIC program has been shown to reduce the rate of low birth weight by 25%, and the rate of very low birth weight by 44%. After 20 years of WIC, the U.S. General Accounting Office concluded that WIC was a cost-effective program – for each federal dollar spent, about $ 3 was saved during the first 18 years of life (33).

Health Canada now funds the Canada Prenatal Nutrition Program in several communities. In 1997, $100 million in additional funding was allocated to this initiative. Where nutrition professionals are the primary caregivers, programs have produced secure and consistent results. Professional nutrition expertise helps standardize nutrition assessment and counselling procedures, and enhances client relationships (34).

Heart Health Programs

The Heart Health Family Challenge was undertaken by Brant and Haldimand-Norfolk health units to encourage families with young children to become more aware of, and active in, heart healthy activities. Two thirds of the families reported making one or more behavioural changes, most often walking or eating a lower fat diet, at a 6 month evaluation. It cost $ 26.00 to reach each participating family with heart health passports, promotional materials, prizes, and a media campaign (35).

Heart health programs such as this were developed and implemented in 7 Ontario communities from 1990 – 1994. The Ministry of Health funded these demonstration projects to identify effective strategies to reduce heart disease. Their final report, What *Worked For Us,* offers program details but limited effectiveness data (35).

The Ministry of Health's Health Promotion Branch commissioned a scan of international heart health projects, in a further attempt to identify effective strategies or best practices (36). Based on these findings and others, the Ministry announced new funding in 1997, for heart health programs across Ontario. As well, a Provincial Food Service Program to promote healthy food choices, food safety, and smoke-free dining in food service establishments has been launched. Public health units are coordinating these programs, with leadership from public health nutrition professionals.

Nutrition is a Complex Issue

Published data on the effectiveness of nutrition programs and services is limited. One reason is that nutrition is a complex issue. Unlike smoking cessation, the goal for dietary change is not a single act. Dietary change requires people to continue eating but to adapt what and how they eat. It involves a series of changes, not only in eating, but also in food shopping and preparation (37). Healthier eating involves eating more of some foods and less of others, messages consumers often find challenging to translate. Consumers are also confused by the changing science of nutrition, and struggle to adapt as new information becomes available.

The Ministry of Health's Health Promotion Branch has catalogued a variety of community-based programs, and interviewed key informants across Canada. Their review, *Best Advice on Effective Nutrition Interventions* remains in draft form at this time (38).

Lack of Sustained Involvement

To demonstrate positive outcomes, intervention programs must be of sufficient duration and intensity. For example, comprehensive heart health programs in workplaces must be sustained for a minimum of one year to bring about risk reduction, and 3 – 5 years to demonstrate cost-effectiveness (39). At this time many public health nutrition programs lack the financial, material, and human resources for sustained involvement.

Public health nutrition programs are key actions in Canada's national nutrition plan. Public health can achieve these national nutrition priorities, if health units have the resources and skills they need to provide sustainable nutrition programs and services.

Public Health Nutrition Professionals Can Maximize Health Outcomes

Public health nutrition programs are effective. Public health nutrition professionals are essential to health units, bringing appropriate skills, and a unique perspective. They are accountable to the public, and can extend their reach and impact with more resources.

Essential and Appropriate Skills

Public health nutrition professionals take a leadership role in many health units. As coordinators within health units, they establish strategic directions, define program priorities, monitor programs and budgets, and manage staff. As community partners, they collaborate with many organizations to ensure that nutrition programs and services are available, accessible, and meet the community's needs.

Public health nutrition professionals are essential to health units. Nutrition programs are mandated, and contribute to several objectives in the 1997 *Mandatory Health Programs and Services Guidelines* (6).

- Nutrition is a key factor in preventing chronic disease. It reduces mortality from heart disease and stroke, and morbidity from diabetes, hypertension, and osteoporosis. These are key objectives for the *Chronic Disease Prevention Program*.
- Reducing low birth weight and decreasing the prevalence of neural tube defects are objectives for the *Reproductive Health Program*. Nutrition makes a major contribution to these prenatal issues.
- Nutrition is essential for the achievement of developmental milestones, and optimal dental health in children. The *Child Health Program* emphasizes these objectives.

The *Health Protection and Promotion Act* requires health units to employ the services of appropriately trained professionals to deliver mandatory programs and services (6). The qualifications of public health nutritionists are specified in Regulation 164/84 of the Act (see Appendix 1). Public health nutritionists and public health dietitians, as well as peer educators and nutrition assistants in some health units, work together to achieve these mandated requirements. (see Appendix 2).

Unique Perspectives

Public health nutrition professionals are the only Registered Dietitians who have a mandate to serve the entire community. They work with many organizations on issues that affect the population. For example, they help neighbourhoods deal with hunger. They monitor the affordability of basic foods, develop food skill programs, work with school nutrition programs, and advocate policy changes.

Public health nutrition professionals have a unique set of knowledge and skills. they

- understand nutrition, an ever-changing and complex science. As educators and communicators, they make nutrition easy to understand and relevant to people's lives.
- understand food – its composition, preparation, storage, and safety, and apply this understanding in their education programs
- understand food laws, labelling and technology, and can interpret these to the public
- understand food habits are formed and changed and can help people change their eating behaviour

Public health nutritionists, trained at the Masters level, are also skilled in community needs assessment, program planning and evaluation, information management, and facilitation. These skills serve them well as health unit leaders and coordinators, and effective partners in many community action groups.

Accountable to the Public

Public health nutrition professionals are Registered Dietitians (RD). They are graduates of accredited undergraduate programs in food and nutrition. They have completed an accredited dietetic internship program or a graduate degree program in nutrition. Licensed by the College of Dietitians of Ontario, they are held accountable by the College for their conduct, their care, and the nutrition advice they provide to the public (40).

Limited Nutrition Resources

In 1997, the number of personnel involved in Nutrition Promotion programs was less than 3% of the total number of public health professionals in Ontario. The Nutrition Promotion budget was just over $ 10.5 million, costing Ontario taxpayers $ 0.97 per capita (41).

The Ministry of Health funds public health nutrition professionals in 6 teaching health units. With their added education and training, they have been a valuable asset to all of the health units. They have evaluated public health nutrition programs, researched public health nutrition issues, and educate future public health professionals. Their provincial funding ends in March, 1999.

Funding for tobacco use prevention resources was similar to that for nutrition, until politicians and professionals acknowledged the impact of tobacco on health. The Ministry of Health enhanced the tobacco budget with 100% funding. In 1997, the Tobacco Use Prevention budgets totalled $ 14.5 million, $ 1.32 per capita (41). This enhancement has enabled public health professionals to increase smoking prevention efforts, and enforce the Tobacco Control Act in Ontario.

Public health nutrition professionals bring many strengths to assist health units to better meet the requirements of provincially mandated programs, and to maximize health outcomes in their communities. If they have the resources they need, they can enhance the number and reach of skilled public health nutrition professionals.

Recommendations

The Ontario Society of Nutrition Professionals in Public Health recommends that the impact of healthy eating, nutrition programs and public health nutrition professionals on the health of communities be acknowledged and supported in the following ways:

1. Funding be allocated to enhance the number of public health nutrition professionals in Ontario health units in order that they can design and deliver efficient and effective nutrition programs and services in their communities as outlined in *Mandatory Health Programs and Services Guidelines.*
2. Municipalities endorse the philosophies and support public health nutrition professionals in taking a leadership role to achieve the strategic directions in Canada's national nutrition plan, *Nutrition for Health: An Agenda for Action.*
3. Municipalities advocate for and support public health nutrition professionals employed in Teaching Health Units, to continue to provide leadership in evaluating best practices and to continue to determine cost-effectiveness in nutrition programming, in collaboration with university nutrition program personnel.

Appendix 1

Qualifications of Public Health Nutritionists

Health Protection and Promotion Act	**Loi sur la protection et la promotion de la santé**
R.R.0. 1990, REGULATION 566	R.R.O. 1990, RÈGLEMENT 566
Amended to O. Reg. 630/00	*modifié jusqu'au Règl. de l'Ont. 630/00*
QUALIFICATIONS OF BOARDS OF HEALTH STAFF	**QUALIFICATIONS DU PERSONNEL DES CONSEILS DE SANTÉ**
1. (1) The requirements for employment as a medical officer of health or an associate medical officer of health in addition to those set out in section 64 of the Act are that the person be the holder of,	**1.** (1) Pour pouvoir être employé comme médecin-hygiéniste ou médecin-hygiéniste adjoint il faut satisfaire aux conditions qui sont énoncées à l'article 64 de la Loi et, de plus, à une des conditions suivantes :
(a) a fellowship in community medicine from The Royal College of Physicians and Surgeons of Canada;	a) être membre, spécialisé en médecine communautaire, du Collège royal des médecins et chirurgiens du Canada;
(b) a certificate, diploma or degree from a university in Canada that is granted after not less than one academic year of full time post graduate studies or its equivalent in public health comprising,	b) être titulaire d'un certificat, diplôme ou grade d'une université canadienne qui sanctionne au moins un an d'études de troisième cycle à plein temps ou l'équivalent dans le domaine de l'hygiène publique, y compris :
(i) epidemiology,	(i) l'épidémiologie,
(ii) quantitative methods,	(ii) les méthodes quantitatives,
(iii) management and administration, and	(iii) la gestion et l'administration,
(iv) disease prevention and health promotion; or	(iv) la prévention des maladies et la promotion de la santé;
(c) a qualification from a university outside Canada that is considered by the Minister to be equivalent to the qualifications set out in clause (b). R.R.O. 1990, Reg. 566, s. 1 (1).	c) avoir une qualification d'une université étrangère que le ministre considère comme l'équivalent des qualifications énoncées à l'alinéa b). Règl. de l'Ont. 600/91, art. 1.
(2) Subsection (1) does not apply to a medical officer of health or associate medical officer of health who was employed by a board of health on the 1st day of July, 1984. R.R.O. 1990, Reg. 566, s. 1 (2).	(2) Le paragraphe (1) ne s'applique pas à un médecin-hygiéniste ou médecin-hygiéniste adjoint qui était employé par un conseil de santé au 1er juillet 1984. Règl. de l'Ont. 600/91, art. 1.
2. (1) The requirements for engaging the services of a person in the classification of business administrator of a board of health are that the	**2.** (1) Pour pouvoir engager les services d'une personne comme administrateur d'un conseil de santé, il faut que la personne en question satisfasse

person,	à une des conditions suivantes :
(a) be the holder of a bachelor's degree in business administration or commerce from a Canadian university and have a minimum of three years experience in business management and administration;	a) être titulaire d'un baccalauréat en administration des affaires ou en commerce d'une université canadienne et compter au moins trois ans d'expérience en gestion et administration des affaires;
(b) be the holder of a qualification issued by a university outside Canada and accepted as equivalent to the qualifications set out in clause (a) by a Canadian university; or	b) avoir une qualification d'une université étrangère reconnue comme l'équivalent des qualifications énoncées à l'alinéa a) par une université canadienne;
(c) has knowledge and experience that the Minister considers equivalent to the requirements set out in clause (a). R.R.O. 1990, Reg. 566, s. 2 (1).	c) posséder des connaissances et une expérience que le ministre considère comme équivalent aux qualifications énoncées à l'alinéa a). Règl. de l'Ont. 600/91, art. 1.
(2) Subsection (1) does not apply to a person who was employed as a business administrator by a board of health on the 1st day of July, 1984. R.R.O. 1990, Reg. 566, s. 2 (2).	(2) Le paragraphe (1) ne s'applique pas à une personne qui était employée comme administrateur par un conseil de santé au 1er juillet 1984. Règl. de l'Ont. 600/91, art. 1.
3. (1) The requirements for employment as a public health dentist of a board of health are that the person be the holder of,	**3.** (1) Pour pouvoir être employé comme dentiste-hygiéniste par un conseil de santé, il faut être titulaire, selon le cas :
(a) a specialty certificate of registration in public health dentistry from the Royal College of Dental Surgeons of Ontario; or	a) d'un certificat d'inscription pour l'exercice d'une spécialité en hygiène publique dentaire délivré par l'Ordre royal des chirurgiens dentistes de l'Ontario;
(b) a general certificate of registration and have successfully completed an approved diploma or degree program in public health consisting of a minimum of 22 months of full-time instruction. O. Reg. 630/00, s. 1.	b) d'un certificat d'inscription général et avoir terminé avec succès un programme agréé aboutissant à l'obtention d'un diplôme ou d'un grade en hygiène publique qui comprend au moins 22 mois de cours à plein temps. Règl. de l'Ont. 630/00, art. 1.
(2) A person employed as a public health dentist of a board of health on or before December 31, 2000 may continue to be employed as a public health dentist of the board of health. O. Reg. 630/00, s. 1.	(2) La personne employée en tant que dentiste-hygiéniste par un conseil de santé au plus tard le 31 décembre 2000 peut continuer d'être employée à titre de dentiste-hygiéniste. Règl. de l'Ont. 630/00, art. 1.
4. The requirements for employment as a dental hygienist of a board of health are that the person be registered as a dental hygienist with the College of Dental Hygienists of Ontario. O. Reg. 630/00, s. 1.	**4.** Pour pouvoir être employé comme hygiéniste dentaire d'un conseil de santé, il faut être inscrit à titre d'hygiéniste dentaire auprès de l'Ordre des hygiénistes dentaires de l'Ontario. Règl. de l'Ont.
5. The requirements for employment as a public	

health inspector are that the person,	630/00, art. 1.
(a) be the holder of a certificate granted by the Board of Certification of Public Health Inspectors of The Canadian Institute of Public Health Inspectors;	**5.** Pour pouvoir être employé comme inspecteur de la santé, il faut satisfaire à une des conditions suivantes : a) être titulaire d'un certificat délivré par le Conseil d'accréditation des inspecteurs de la santé de l'Institut canadien des inspecteurs en hygiène publique;
(b) is registered as a veterinarian under the *Veterinarians Act* and is the holder of a certificate in veterinary public health or has experience that the Minister considers equivalent to such registration and certification; or	b) être inscrit à titre de vétérinaire en vertu de la *Loi sur les vétérinaires* et être titulaire d'un certificat en hygiène publique vétérinaire ou posséder une expérience que le ministre considère comme l'équivalent de cette inscription et de ce certificat;
(c) be the holder of a certificate issued prior to the 1st day of July, 1979 by The Canadian Public Health Association or by a certifying organization that is recognized by The Canadian Public Health Association. R.R.O. 1990, Reg. 566, s. 5.	c) être titulaire d'un certificat délivré avant le 1er juillet 1979 par l'Association canadienne de santé publique ou par un organisme d'accréditation reconnu par l'Association canadienne de santé publique. Règl. de l'Ont. 600/91, art. 1.
6. The "public health nursing education" prescribed for the purposes of clause 71 (3) (a) of the Act is,	**6.** La «formation d'infirmière-hygiéniste» prescrite pour l'application de l'alinéa 71 (3) a) de la Loi consiste en :
(a) a certificate or diploma obtained after not less than one academic year in public health nursing; or	a) soit un certificat ou diplôme obtenu après au moins un an d'études d'infirmière-hygiéniste;\
(b) a nursing degree that includes preparation in public health nursing. R.R.O. 1990, Reg. 566, s. 6.	b) soit un diplôme d'infirmière sanctionnant notamment une préparation à l'exercice de la profession d'infirmière-hygiéniste. Règl. de l'Ont. 600/91, art. 1.
7. (1) The requirements for employment as a public health nutritionist by a board of health are that the person be registered with the College of Dietitians of Ontario and that the person,	**7.** (1) Pour pouvoir être employé comme nutritionniste de l'hygiène publique par un conseil de santé, il faut être inscrit auprès de l'Ordre des diététistes de l'Ontario et, selon le cas :
(a) be the holder of a master's degree from a Canadian university or a university post graduate diploma from the University of Toronto issued prior to the 31st day of December, 1979, with a major in community nutrition or public health nutrition;	a) être titulaire d'une maîtrise d'une université canadienne ou d'un diplôme d'études du troisième cycle de l'Université de Toronto délivré avant le 31 décembre 1979, avec concentration en nutrition communautaire ou en hygiène alimentaire
(b) be the holder of a master's degree from a Canadian university in human nutrition together with community nutrition	

courses or field or work experience in community nutrition or public health nutrition;	publique;
(c) be the holder of a qualification issued by a university outside Canada and accepted as equivalent to the qualifications set out in either clause (a) or (b) by a Canadian university; or	b) être titulaire d'une maîtrise d'une université canadienne en diététique et avoir suivi des cours en nutrition communautaire ou posséder une expérience pratique ou professionnelle dans le domaine de la nutrition communautaire ou de l'hygiène alimentaire publique;
(d) has knowledge and experience that the Minister considers equivalent to the requirements set out in clause (a) or (b). R.R.O. 1990, Reg. 566, s. 7 (1); O. Reg. 630/00, s. 2.	c) avoir une qualification d'une université étrangère reconnue comme l'équivalent des qualifications énoncées à l'alinéa a) ou b) par une université canadienne;
	d) posséder des connaissances et une expérience que le ministre considère comme équivalant aux qualifications énoncées à l'alinéa a) ou b). Règl. de l'Ont. 600/91, art. 1; Règl. de l'Ont. 630/00, art. 2.
(2) Subsection (1) does not apply to a person who was employed as a public health nutritionist by a board of health on the 1st day of July, 1984. R.R.O. 1990, Reg. 566, s. 7 (2).	(2) Le paragraphe (1) ne s'applique pas à une personne qui était employée par un conseil de santé comme nutritionniste de l'hygiène publique au 1er juillet 1984. Règl. de l'Ont. 600/91, art. 1.

Competencies for the Entry-Level Dietitian

The following set of competencies reflects the knowledge, skills, abilities, attitudes, and judgements necessary for the competent performance of entry-level dietitians. It is expected that individuals will progress to higher levels of practice.

Dietitians of Canada

January 1997

KNOWLEDGE STATEMENTS

The entry-level dietitian is knowledgeable in the five areas listed below, for the promotion of optimum **nutrition**, health, and well being for groups and individuals. The first three areas, food availability, food consumption, and biological utilization of food, are determinants of the fourth area, nutrition and health. Topics listed under "Other Essential Areas" impact on all of the other areas, and are critical to the practice of dietetics. These Knowledge Statements* represent the underlying knowledge required of an entry-level dietitian to perform the competencies.

1. Food availability

1.1 Influence of social, economic, cultural, political, and environmental factors on food availability.

1.2 Assessment of the quantity and quality of food available to the individual, the family, and the community.

1.3 Principles of food science and their application to food processing, handling, and quality food production and their impact on nutrient content and availability.

1.4 Influence of food production, processing, and distribution systems on food availability.

1.5 Principles involved in menu planning for optimum nutrition of individuals and groups in both health and disease states.

2. Food Consumption

2.1 Influence of the political, social, and economic factors on food consumption.

2.2 Influence of psychological and cultural factors and health status on food consumption.

2.3 Influence of food practices on environmental and ecological integrity.

2.4 Assessment of food consumption for individuals and groups.

***Adapted from: Framework for the Education of Dietitians for the 21st Century**

3. Biological Utilization of Food

3.1 Relationship of chemistry, biochemistry, physiology, and microbiology to the biological utilization of foods.

3.2 Relationship of biological utilization of foods to nutritional status.

3.3 Factors that determine nutritional requirements and the utilization of foods throughout the life cycle.

3.4 Factors that determine nutritional requirements and the utilization of foods in different states of health.

4. Nutrition and Health

4.1 Interrelationship of nutritional status with health and disease of individuals and of groups.

4.2 Assessment and monitoring of nutritional status and needs of individuals and groups throughout the life cycle.

4.3 Health promotion strategies, community development, and assessment of their needs.

4.4 Principles involved in planning, implementing, monitoring, and evaluating nutrition interventions.

5. Other Essential Areas

5.1 Client focused approach.

5.2 Ethics as applied to personal and professional practice.

5.3 Basic concepts involved in research methodology, data analysis, and critical thinking.

5.4 Application of computer technology to dietetic practice.

5.5 Principles of interpersonal communication, with consideration to individuals, families, and group dynamics.

5.6 Principles governing education, learning, and behaviour and their application to dietetic practice.

5.7 Application of personnel management and organizational behaviour to dietetic practice.

5.8 Fundamentals of quality management and risk management as applied to dietetic practice.

5.9 Budgeting, accounting, strategic planning, and managerial systems and their application to resource management.

5.10 Fundamentals involved in marketing food and nutrition services.

5.11 Political and legislative processes in health promotion and healthy delivery.

ASSUMPTIONS

The Dietitian:

1. through the integration, translation, and application of food, nutrition and social sciences, and management theory, works with individuals and populations to create strategies to enable clients to achieve their food and nutrition related goals.
2. practices independently, interdependently, and collaboratively with appropriate others (e.g., client, colleagues, agencies, teams, etc.).
3. practices within legislated/professional regulations and/or guidelines.
4. practices with a knowledge base/theory of practice.
5. is responsible for her/his professional growth and development.
6. assumes a variety of roles (e.g. clinical, education, health promotion, administration, food service management, research, consulting, etc.).
7. practices with a client focus.

The Client:

1. may be an individual, family, group, agency, employer, employee, organization, community, etc.
2. is a potential or actual recipient of the dietitian's expertise.
3. is unique, diverse in needs, culture, demands, motivations, resources, religion, and definition of wellness.
4. is an active partner in the process.

The Environment:

1. includes a variety of practice settings and relationships.
2. encompasses physical, social, political, economic, and cultural factors.
3. is influenced by legislation, regulatory and professional bodies, the public, employment philosophies and practices, research, and technology.
4. is ever changing and dynamic.

Health:

1. is impacted by nutrition.
2. exists on a continuum of wellness to illness.

COMPETENCIES

PROFESSIONAL PRACTICE

1. practices dietetics in accordance with the ethics of the profession by:
   a) demonstrating integrity in professional practice.
   b) demonstrating empathy in professional practice.
   c) maintaining objectivity.
   d) practices dietetics in accordance with the ethics of the profession by maintaining confidentiality.
   e) observing conflict of interest guidelines.
   f) working in the best interest of the client.
   g) identifying and acting appropriately in dealing with unethical or incompetent behaviour.

2. promotes a high standard of professional practice by:
   a) supporting colleagues in the pursuit of their professional development.
   b) supporting the training and education of others.
   c) supporting the advancement of dietetic practice, research, and knowledge.
   d) promotes a high standard of professional practice by disseminating nutrition knowledge and information.

3. commits to a high standard of professional competence through continuous learning and self-development by:
   a) assessing personal and professional strengths and limitations.
   b) identifying development needs in practicing dietetics.
   c) pursuing a plan for self-development.
   d) monitoring a plan for self-development.

4. manages time efficiently.

5. practices effectively to achieve desired outcomes.

6. accepts accountability in performing responsibilities.

7. practices within areas of competence.

8. utilizes research to improve practice.

9. applies a research approach to problem solving by:
   a) examining a problem.
   b) reviewing related literature/resources.
   c) applying research findings to the problem.
   d) evaluating the results of the solution.

ASSESSMENT

1. identifies and confirms issues that have dietetic implications.

2. identifies/obtains relevant data including:
   a) needs assessment data.
   b) identifies/obtains relevant data including dietary intake data (e.g., 24 hour recall, food frequency, and food record).
   c) health record data (e.g., anthropometric, biochemical, clinical, dietary, psychosocial).
   d) team/stakeholder meetings data (formal and informal).
   e) physical nutritional assessment data (e.g., height, weight, anthropometrics).
   f) operational parameters (e.g., physical layout, staffing levels, union contracts).
   g) financial data (e.g., enteral feeding product cost, socioeconomic status of clients, monthly budget reports).
   h) quality management data (e.g., client satisfaction questionnaire, standards of practice audit).
   i) marketing data.
   j) factors affecting learning (e.g., literacy, language comprehension, readiness to learn).
   k) product data (e.g., product specifications).
   l) appropriate literature/resources (e.g., epidemiological, demographic, practical research).
   m) legal and contractual information.

3. recognizes factors affecting an issue (e.g., psychosocial, cultural, political, legal, ethical, religious, linguistic, environmental, social, economic, organizational, and biomedical factors).

4. uses effective data collection techniques (e.g., interviews, surveys, literature reviews, focus groups).

5. translates raw data into interpretable data (e.g., height/weight to BMI, foods to nutrients, financial data to budget variance).

6. integrates and interprets:
   a) needs assessment data.
   b) dietary intake data (e.g., 24 hour recall, food frequency, and food record).
   c) health record data (e.g., anthropometric, biochemical, clinical, dietary, psychosocial).
   d) team/stakeholder meetings data (formal and informal).
   e) physical nutritional assessment data (e.g., height, weight, anthropometrics).
   f) operational parameters (e.g., physical layout, staffing levels, union contracts).
   g) financial data (e.g., enteral feeding product cost, socioeconomic status of clients, monthly budget reports).
   h) quality management data (e.g., client satisfaction questionnaire, standards of practice audit).
   i) marketing data.
   j) factors affecting learning.
   k) product data (e.g., product specifications).
   l) appropriate literature/resources (e.g., epidemiological, demographic, practical research).
   m) legal and contractual information.

7. formulates conclusions based on the interpretation and integration of data.

PLANNING

1. establishes, with the client and appropriate others, realistic goals consistent with the assessment, ethical considerations, legislation, and policies.

2. determines, with the client and appropriate others, measurable objectives.

3. priorizes, with the client and appropriate others, the objectives.

4. formulates, with the client and appropriate others, strategies to meet the objectives.

5. develops, with client and appropriate others, plans of action for managing:
   a) human resources (e.g., recruiting, orienting, training, supervising, evaluating, scheduling).

b) financial resources (e.g., inventory management).

c) the quality of programs, products, and services.

d) communication.

e) education.

f) community action.

g) practice-based research.

h) operations (e.g., schedules, safety, policies and procedures, emergency response, contractual agreements).

i) technology (e.g., computer utilization).

j) facilities and equipment.

k) the safe provision of foods/nutrients (e.g., menu planning, production, distribution, choice of nutritional products).

l) the marketing of programs, products, and services.

6. develops a specific plan of action with the client and appropriate others to meet the objectives for nutrition promotion and clinical nutrition by:

a) defining framework.

b) identifying the appropriate approach (e.g., program, advocacy,

feeding route, dietary regimen).

c) determining content.

d) developing time lines.

e) identifying the responsibilities and accountability of the client and appropriate others.

f) identifying, accessing, managing and/or creating resources required to implement the plan of action.

g) identifying collaborators and support services (e.g., self-help groups, community agencies, local businesses).

h) determining monitoring parameters.

i) determining monitoring methods.

j) determining decision point criteria.

k) establishing outcome measures.

l) addressing the implications of the plan with the client and appropriate others.

m) addressing constraints to implementing the plan.

n) determining implementation strategies (e.g., media, lobbying, counselling strategies).

o) establishing short and long-term plans.

p) establishing evaluation procedures to measure the effectiveness of the plan.

q) adjusting the plan of action as required.

IMPLEMENTATION

1. activates the plan by
   a) communicating the plan to the client and appropriate others.
   b) confirming the responsibilities and accountability of the client and appropriate others.

2. executes the plan by:
   a) managing the delivery of programs, products, and services (e.g., delegating when appropriate).
   b) using a variety of strategies to meet client needs.
   c) creating an environment conducive to executing the plan.
   d) utilizing/developing resources (e.g., education materials, practice-based research, discussion with colleagues).
   e) managing human resources.
   f) managing within the established budget.
   g) utilizing practice-based research approaches.
   h) applying pertinent legislation, standards, and contractual agreements.

3. monitors the achievement of the plan's objectives according to:
   a) client acceptance/satisfaction.
   b) quality of products and services.
   c) human resource utilization (e.g., supervision, performance evaluation, workload measurement).
   d) financial performance (e.g., cost effectiveness, budget variance).
   e) communications (e.g., feedback, response to the plan).
   f) operations (e.g., time plan, safety, and sanitation).
   g) facilities, equipment, and technology availability and utilization.
   h) safe provision of foods/nutrients (e.g., intake assessment, product dating).
   i) behaviour/attitude change.
   j) other monitoring parameters as identified (e.g., laboratory results, cafeteria revenue).

4. modifies the plan, as indicated through the monitoring process or as the result of unexpected circumstances.

EVALUATION

1. evaluates the achievement of the planned objectives with respect to:
   a) outcomes.
   b) effectiveness.
   c) efficiency.
   d) client satisfaction.

2. evaluates the process with respect to:
   a) effectiveness.
   b) efficiency.
   c) client satisfaction.
   d) impact (e.g., financial, community, psychosocial and nutritional benefit).

3. evaluates the outcomes with respect to:
   a) goals.
   b) effectiveness.
   c) efficiency.
   d) client satisfaction.
   e) impact (e.g., financial, community, psychosocial and nutritional benefit).

4. determines the need for further evaluation.

5. determines the need for future action.

COMMUNICATION

1. collaborates with clients, colleagues, agencies, etc. during all phases of practice (i.e., assessment, planning, implementation, and evaluation).

2. uses appropriate communication channels (e.g., formal, informal, focus groups, community action).

3. uses a variety of opportunities for teaching.

4. applies principles of education (e.g., adult education, learning challenged).

5. recognizes and responds to nonverbal communication (e.g., resistance to change, lack of understanding).

6. uses appropriate terminology for the client, team members, and appropriate others.

7. communicates using appropriate technology (e.g., television, slides, computers).

8. communicates effectively considering the client's profile (e.g., positioning marketing strategies).

9. actively participates with individuals and groups.

10. provides information at the appropriate comprehension level.

11. seeks, recognizes, and responds appropriately to feedback.

12. demonstrates effective oral and written communication skills.

13. effectively demonstrates the following communication skills when appropriate:
    a) advocacy.
    b) negotiation.
    c) lobbying.
    d) interviewing.
    e) teaching.
    f) counselling.
    g) facilitating.

14. documents at each stage of the process:
    a) according to policy, established time lines, and legal requirements.
    b) in an appropriate format (e.g., concise and organized style).

GLOSSARY

NUTRITION

Nutrition refers to both the science and art of nutrition.

The science of nutrition includes:

- ✓ the nutritive value of foods
- ✓ the metabolism of foods
- ✓ the qualitative and quantitative requirements for foods at different stages of the life cycle to meet physiological changes and activity needs
- ✓ the changes in nutrient and food requirements that optimize health, prevent disease or treat disease/condition
- ✓ the economic, physiological, social and cultural factors that affect the selection and consumption of foods

The art of nutrition includes:

- ✓ diverse, but complementary methods and/or approaches, including communication, education, organizational change, food provision, legislation, community development and nutrition care. These methods and approaches lead to optimal nutritional status of individuals and groups.

PROFESSIONALISM

Professionalism refers to the attributes, behaviors and ethics that are expected of individuals aspiring to have, or with professional standing (i.e., Registered Dietitian)

ENTRY-LEVEL DIETITIAN

Entry-Level Dietitian refers to a level of proficiency most often associated with, but not necessarily describing individuals entering practice. The Entry-Level Dietitian is competent in the application of knowledge and skills considered essential to entry-level dietetic practice.

APPROPRIATE OTHERS

Appropriate others refers to the client and potential partners in the process. Administration, staff, community representatives, resource people, suppliers, family, interest groups and health care team may be appropriate others.

MARKETING DATA

Marketing data refers to identified elements which must be considered in evaluating the potential benefits of a good, service, or program. Marketing data may emphasize financial or personal factors. Data elements could relate to target group characteristics including age, sex, health needs, spending habits, etc. Marketing data may be primary or secondary. Original information, such as that obtained from observations, interviews, focus groups, and surveys is referred to as primary data. This type of data is used to develop strategies and tactics specific to the target population. Secondary data is obtained from other sources, such as clinic records, publications and reports. This type of data provides ideas, direction and trends, but may not be relevant to the target population.

DECISION POINT CRITERIA

Decision point criteria are identified during the planning process. They reflect the specific monitoring parameter values that will require a change in the plan of action or a decision with respect to the goals or objectives.

MANAGING

Managing refers to a broad spectrum of activities that include planning (e.g., determining goals, objectives, policies, procedures and methods), organizing (e.g., determining span of management, authority, responsibility, delegation), utilizing resources such as human, fiscal and operational (e.g., human resource planning, staff recruitment and selection, orientation development, performance appraisal), leading (channelling/facilitating human effort for the accomplishment of the objectives) and evaluating (ensuring the plan is being implemented and that progress towards the objectives is being made).

MONITORING

Monitoring consists of two components: implementation monitoring and process monitoring. The former identifies discrepancies between the plan and reality, ensures that the plan is followed or results in plan modification. The latter monitors progress towards the objectives, and allows for adjustment in the plan to meet the objectives.

EVALUATE

Evaluation is the process of determining if the goals and objectives have been met. Outcome evaluation addresses issues relating to the strengths and weaknesses of the plan and recommendations for future modifications. Process evaluation determines the efficiency and effectiveness by which outcomes are met. The evaluation process is a valuable tool to facilitate decision making.

OUTCOMES

Goals are broad statements of the desired or intended outcomes. Objectives are statement(s) that define specific detailed outcomes which will contribute to achieving the goal.

GOALS AND OBJECTIVES

- ✓ goals and objectives should be individualized and centered on the client and the client's needs.
- ✓ goals and objectives should be set with the client and appropriate others.
- ✓ goals and objectives should be realistic.
- ✓ goals and objectives should consider time limits. It may be appropriate to have both long and short term goals.
- ✓ goals and objectives must be measurable.
- ✓ objectives should be stated in specific, concise terms.

COMMUNITY ACTION

Community action refers to community, family and individual involvement in local issues: influencing programs and events. Initiatives taken to involve individuals and groups in the process of assessment, planning, implementation and evaluation of programs and services lead to self-sufficiency and the control of a community over its own affairs. Community action involves identifying interested parties and establishing communication links. Community action may include interaction with peer groups, interest groups, partnerships and appropriate others.

Appendix 2

Example of Staffing to meet Mandatory Program Guidelines

Mandatory Health Programs and Services Guidelines – Chronic Disease Prevention		
No 14 The board of health shall work with restaurants, grocery stores, other food purchase outlets, and community partners to promote and provide information for, offer education and skills development programs, and improve physical and social environments for people to adopt healthy eating practices. This shall include as a minimum:		
a. Promote and provide information on an ongoing basis about healthy food choices in grocery stores, restaurants and cafeterias including displays, posters and point-of-purchase information	Master's Level Nutritionist	Develop and conduct needs assessment Plan and develop the overall campaign Develop evaluation tool Manage the implementation and evaluation processes
	Public Health Dietitian	Implement campaign Write the point-of-purchase information
	Peer Educators	Conduct Displays
	Nutrition Assistant (Student)	Conduct and tabulate the evaluation
b. Promote and provide information and skills development for the public and particular target groups through groups sessions on choosing, purchasing and preparing healthy foods at a frequency of 20 group sessions per 100,000 population of 20 group sessions per year, whichever is greater	Master's Level Nutritionist	Develop and conduct needs assessment with target groups Decide on type of group session for each target group Plan and develop the overall campaign Develop the evaluation tool Manage the implementation and evaluation processes
	Public Health Dietitian	Plan group sessions Develop materials Train peer educators
	Peer Educators	Conduct group sessions
	Nutrition Assistant (Student)	Conduct and tabulate the evaluation
c. Provide consultation to restaurants and cafeterias to enable them to offer and promote healthy food choices to their customers on an ongoing basis	Master's Level Nutritionist	Manage overall campaign for c,d,e Develop needs assessment and evaluation tool Develop overall strategy for restaurants
	Public Health Dietitian	Provide menu consultation Conduct recipe analysis Develop recipes
	Nutrition Assistant (Student)	Conduct and tabulate evaluation
d. Provide a healthy eating education component in Food Handler Training Courses in collaboration with Food Safety Requirement 4 on an ongoing basis	Nutritionist	Manage overall campaign for c,d,e Develop needs assessment and evaluation tool
	Dietitian	Plan component Train Inspector to deliver component
e. Provide healthy eating education programs for food industry personnel annually including workshops, newsletter inserts and food demonstrations	Master's Level Nutritionist	Manage overall campaign for c,d,e Develop needs assessment and evaluation tool
	Public Health Dietitian	Develop workshops, food demonstrations Write newsletter inserts Train peer educators
	Peer Educator	Delivery food demonstration
	Nutrition Assistant (Student)	Conduct and tabulate evaluation

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