



October 2012 Call to Action:
**CREATING A
HEALTHY WORKPLACE
NUTRITION ENVIRONMENT**
Ontario Society of Nutrition Professionals in
Public Health Workplace Nutrition Advisory Group

Authors

Call to Action: Creating a Healthy Workplace Nutrition Environment was prepared by the Ontario Society of Nutrition Professionals in Public Health (OSNPPH) Workplace Nutrition Advisory Group.

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www.osnpnh.on.ca

For more information please contact: info@osnpnh.on.ca

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"Healthy eating is the keystone of good health. What better place to promote healthy eating than the workplace – where we spend most of our waking hours!" – Division of Prevention and Rehabilitation, University of Ottawa Heart Institute

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Call to Action: Creating a Healthy Workplace Nutrition Environment

This Call to Action challenges employers, employees, workplace food service operators, food distributors, unions, government and group benefits insurance companies to acknowledge and act on their role in establishing a supportive nutrition environment in workplaces.

1.0 Executive Summary

The *Call to Action: Creating a Healthy Workplace Nutrition Environment* addresses the importance of healthy eating in the workplace context by presenting the link between nutrition, productivity and the prevention of chronic disease among employees.

Current eating habits are contributing to rising rates of nutrition related health conditions such as heart disease, stroke, type 2 diabetes, some types of cancer, obesity and depression. It is time to address the poor eating habits of Ontarians. Less than 1% of Canadians follow a diet consistent with nutrition recommendations in *Eating Well with Canada's Food Guide*.¹ Given that most employed Canadian adults spend at least 60% of their waking hours at work and eat at least one meal during the workday, the workplace is an ideal setting to promote healthy eating.²

Adequate nutrition is essential for the overall health and vitality of employees. Promoting healthy eating in the workplace can help to prevent workplace costs related to absenteeism, reduced productivity, increased insurance premiums, medical costs, prescription drug costs, as well as higher rates of injury, disability and early retirement.³⁻¹⁹

The Ontario Society of Nutrition Professionals in Public Health (OSNPPH) Workplace Nutrition Advisory Group calls on workplaces to create a Healthy Workplace Nutrition Environment by providing surroundings and conditions that foster good health and support healthy eating.

The OSNPPH has identified nine elements essential to a Healthy Workplace Nutrition Environment. The nine essential elements are:

- | | |
|--|---|
| 1. Organizational commitment to a positive healthy eating culture. | 6. Nutrition education for key decision makers and intermediaries provided by a Registered Dietitian. |
| 2. Supportive social eating environment. | 7. Access to services from a Registered Dietitian. |
| 3. Supportive physical eating environment. | 8. Safe food practices and accommodation of special dietary needs. |
| 4. Access to healthy, reasonably priced, culturally appropriate food. | 9. Nutrition policies that encourage healthy eating. |
| 5. Credible nutrition education and social support for employees and their families. | |

In order to achieve the nine essential elements, suggested actions have been proposed for stakeholders including: employers, food service operators, food distributors, union members, group benefits insurance companies, the provincial government and public health. The essential elements and suggested actions are outlined in Section 5.

Further, the OSNPPH strongly recommends that all workplaces in Ontario implement the *Nutrition Standards for Workplaces*® which emphasizes food and beverages with “Maximum Nutritional Value”. The *Nutrition Standards for Workplaces*® can be used to assess food and beverages that are offered and sold in the workplace to determine if they follow the recommendations in *Eating Well with Canada's Food Guide*.

Please see Appendix A: *Nutrition Standards for Workplaces*® for a description of food categories. The *Nutrition Standards for Workplaces*® were adapted from the *Nutrition Standards for Nutrition Tools for Schools*® by the Ontario Society of Nutrition Professionals in Public Health, October 2010 v2.

2.0 PURPOSE OF THE CALL TO ACTION

2.0 Purpose of the Call to Action: Creating a Healthy Workplace Nutrition Environment

The OSNPPH calls on stakeholders including employers, food service operators, food distributors, union members, group benefits insurance companies and the provincial government to acknowledge that the current nutrition environment in Ontario workplaces is a significant public health issue that needs to be addressed and recognize that workplaces play a critical role in creating and maintaining a culture that encourages and models reasonable and healthy workplace practices.

The *Call to Action* offers a framework based on nine essential elements, which key stakeholders can use to create, implement and support a Healthy Workplace Nutrition Environment within their own jurisdiction using a comprehensive workplace health model (see Fig. 1).





3.0 Background

The Ontario Society of Nutrition Professionals in Public Health (OSNPPH) is the official organization of Registered Dietitians working in the Ontario public health system. OSNPPH members have special training in nutrition from accredited universities and are members of The College of Dietitians of Ontario. Members are primarily employed by local public health departments/units and are experts in nutrition in the area of public health, with a focus on improving health and preventing disease.

Under the *Health Protection and Promotion Act* (Ministry of Health and Long-Term Care, 1990), nutrition professionals working in public health in Ontario are mandated to provide public health programs and services targeted at health promotion, health protection and the prevention of disease. Health program and service guidelines are found in the document entitled *Ontario Public Health Standards* (Ministry of Health and Long-Term Care, 2008). Working with workplaces is one focus of the Chronic Disease Prevention Standards in the *Ontario Public Health Standards*.

The board of health shall use a comprehensive health promotion approach to increase the capacity of workplaces to develop and implement healthy policies and programs, and to create or enhance supportive environments to address the following topics:

- Healthy eating
- Healthy weights
- Physical activity
- Work stress
- Exposure to ultraviolet radiation
- Alcohol use
- Comprehensive tobacco control

There has been a significant increase in nutrition related chronic diseases among Canadians. Several groups have identified actions to prevent the development of nutrition related chronic diseases. For example, the Sodium Working Group and the Trans Fat Task Force have identified the need to reduce the sodium and trans fat content of prepared foods.^{20,21}

Various organizations such as Public Health Ontario,²² Cancer Care Ontario,²² the Heart and Stroke Foundation,²³ Dietitians of Canada,²⁴ Chronic Disease Prevention Alliance of Canada²⁵ and the Canadian Diabetes Association²⁶ have also identified the need to improve the nutritional intakes of Canadians.

4.0 HEALTHY EATING AT WORK



4.0 Healthy Eating at Work

4.1 Benefits of Healthy Eating

Eating Well with Canada's Food Guide defines and promotes healthy eating for Canadians. It translates the science of nutrition and health into a healthy eating pattern by describing the types and amounts of food people need.²⁷ Healthy eating as recommended by *Canada's Food Guide* is associated with a lower risk of developing nutrition related chronic diseases.²⁷ Following the recommendations in *Canada's Food Guide* contributes to overall health and vitality and helps to ensure that individuals meet vitamin, mineral and other nutrient needs.²⁷

Healthy eating includes the enjoyment of a variety of foods from each of the four Food Groups from *Canada's Food Guide* and respect of one's hunger and satiety cues. Healthy eating is determined over time as people of all ages experience fluctuations in appetite and food and beverage intake for many reasons. It is the overall pattern of foods eaten over time and not any one food or meal that determines if eating behaviours are healthy. Promoting healthy eating in the workplace considers this and takes a positive, respectful and supportive approach to eating.²⁸

Adequate nutrition is essential for the overall health and vitality of employees.²⁷ Employees who have the benefit of optimal health are more likely to be at work and performing well.^{15,29,30} Productivity and concentration can be optimized in the workplace by providing adequate time for meals and access to healthy food in the workplace.^{31,32}

A healthy diet is associated with lower incidence of nutrition related chronic conditions such as heart disease, stroke, obesity, type 2 diabetes, certain types of cancer and depression.^{1,20,33-40} Promoting healthy eating in the workplace can contribute to a reduction in 1) workplace costs related to absenteeism, 2) rates of injury and disability, 3) insurance premiums, prescription drug costs, medical costs and workers compensation, 4) early retirement and 5) automobile collisions, typically associated with the development of nutrition related health conditions.³⁻¹⁷ Making changes in the workplace that support healthy eating may increase productivity and assist individuals who have chronic diseases to manage their conditions.^{15,19,29,30,32,41,42}

4.0 HEALTHY EATING AT WORK

4.2 Current Consumption Trends of Canadian Adults

Less than 1% of Canadians follow a diet consistent with nutrition recommendations in *Canada's Food Guide*.¹ Consumption of vegetables (specifically dark green and orange vegetables), whole fruit and whole grains is inadequate.¹ Over one fifth of the calories Canadian adults consume are categorized as “*Foods to Limit*” by *Canada's Food Guide* (i.e., cakes, cookies, granola bars, doughnuts, muffins, ice cream, frozen desserts, french fries, potato chips, nachos, salty snacks, alcohol, fruit flavoured drinks, soft drinks, sports drinks, energy drinks and sweetened hot or cold drinks).⁴³ Consuming “*Foods to Limit*” on a regular basis means that nutritious foods are displaced from diets or individuals are eating too many foods high in calories, added salt, sugar and fat. This can contribute to the development of high blood pressure, high cholesterol, metabolic syndrome, heart disease, stroke, type 2 diabetes, certain types of cancer, obesity, kidney disease and osteoporosis.^{20,33-35,37,39,44-55}

The negative consequences and long term implications of unhealthy eating practices cannot be overstated. The increasing prevalence of chronic disease will impact the workforce, as the presence of a chronic health condition is associated with reduced participation in the labour force.^{4,56-58} Additionally, unhealthy eating practices will continue to overburden the health care system. In 2007, chronic diseases were responsible for 79% of all deaths in Ontario.²² Of these deaths, 80% were due to nutrition related chronic disease such as cardiovascular disease, cancer and type 2 diabetes.²² These preventable diseases diminish our quality of life, economy and communities.²² For example, the financial implications of chronic diseases impact the financial well-being of the province. In 2010, Ontario health sector spending accounted for about 46 cents of every program dollar. If left unchecked, health care spending may increase to 70 cents of every program dollar by 2022.⁵⁹



4.3 Moving Beyond Education: The Case for a Supportive Nutrition Environment in the Workplace

It had been assumed that providing education would be adequate to prompt individuals to make healthier food choices. Existing health promotion efforts have had a substantial impact on the awareness of the importance of healthy eating among the Canadian population. As a result of health promotion efforts, 88% of Canadians say that healthy eating is important to them.⁶⁰ Despite high awareness levels, eating habits have been getting worse over the years, demonstrating that current techniques used in interventions to promote healthy eating have not been very effective at improving eating behaviour.^{61,62} Interventions aimed at individuals often assume that eating behaviours occur in isolation, under sole control of the individual as a result of rational and thoughtful choice.⁶² However, there is evidence to suggest that eating behaviours are largely automatic and are highly influenced by physiological, psychological, social and environmental factors that occur outside the conscious awareness of individuals.⁶²⁻⁷⁰ Interestingly, even when individuals are aware of the possibility that certain factors can influence the food intake of others, they often deny that those same factors influence their own behaviour. This is because individuals tend to attribute their own behaviour to intent, desire, free will and personal control.^{66,68,69,71,72}

4.0 HEALTHY EATING AT WORK

Physiological Factors

Researchers believe that foods high in fat, sugar or white flour (i.e., “*Foods to Limit*”) act in the brain in a similar way to addictive drugs such as cocaine, which makes them very tempting and difficult for people to resist.⁷³⁻⁸⁰ This secondary reward system in the brain is not linked to a need for calories and can motivate individuals to eat even when they are not hungry (e.g., dessert).⁸¹⁻⁸³ In addition, gaining weight by eating foods high in added fat and sugar (i.e., “*Foods to Limit*”) can change the brain, which subsequently promotes overeating.⁷⁵

Each time a tempting food is encountered, mental effort is required to make the conscious decision to resist or give in and consume the food.^{64,65} There is a natural variability in each individual’s reward response to food and ability to resist tempting food.^{63,70,76,82,84-91} Considering that the average individual makes over 200 food choices per day,⁹² a great deal of mental effort is required in order for an individual to resist tempting food throughout each day.

Individuals who find certain foods highly rewarding and who have a lower natural ability to resist are prone to consume tempting foods when they are available.^{63,85,93-97} Therefore, some individuals are naturally more vulnerable to food cues than others.^{63,83,97} This vulnerability appears to be at least partially genetically determined and remains consistent over time.^{90,96,98-100} Although researchers have developed methods to increase individual inhibitory control (self control) for short periods of time,^{86,101-103} there are currently no community level interventions that have proven to be effective in the long term.^{102,104}

There are also fluctuations in each individual’s ability to resist tempting food. Several studies suggest this mental function relies on blood glucose as an energy source.¹⁰⁵⁻¹⁰⁸ When individuals have lower levels of blood glucose, their ability to resist temptation is impaired.^{105,106,109} During periods before meal times, blood glucose is lower, leaving less blood glucose for the mental processes needed to resist tempting food.^{107,108} Therefore, food decisions that are made when people are hungry tend to be more impulsive than decisions made when individuals have an adequate supply of blood glucose.¹⁰⁸ This likely explains why individuals fail to follow their intentions to eat healthier diets, when provided with opportunities to eat tempting foods. For example, many consumers have the perception that they would make healthy choices if food retailers offered healthier food options.¹¹⁰ However, food service operators report that healthy choices do not sell.¹¹⁰⁻¹¹² Therefore, it appears that individuals have difficulty putting their intentions into action, especially in an environment that also offers many opportunities to indulge in less healthy food choices.^{93-95,113-118}

The part of the brain that enables individuals to resist tempting food is also responsible for other functions such as problem solving, learning and dealing with stress.¹¹⁹ The demands of a typical workday use a great deal of mental energy, leaving individuals susceptible to environmental food cues.^{62,66,107,120-122} This may explain the observation that stressful work environments where workers experience high demand, lower job control and low social support are often related to unhealthy eating behaviours such as skipping meals, eating at workstations, using food as a way to cope, extra snacking and a preference for calorie dense foods.^{3,123,124}

Social Psychological Factors

People are largely unaware that their own eating behaviours are influenced by the behaviour of others.^{68,125,126} Eating with others can influence the amount as well as the types of foods eaten^{65,68,125,127-134} and individuals tend to have similar dietary patterns to other people in their social networks.^{65,125,133,135-138}

4.0 HEALTHY EATING AT WORK



Food is often an important component of social activities and eating food with other people can create a sense of belonging.^{131,139} However, group social norms around eating can also have negative effects. For example, people who eat more during social occasions are viewed as likable, whereas, people who show restraint and eat minimally are not particularly liked by their eating companions and are viewed as high-strung, serious, unhappy and antisocial.^{128,130,132} Therefore, people may feel considerable social pressure to eat in situations where they want to ‘fit in’.^{132,140} In this regard, work related activities that revolve around eating and drinking can promote poor diet quality and excess caloric intake. Such activities include workplace celebrations, fundraisers, social events and entertaining clients.¹⁴¹

Social events that are centered on food may also make it more difficult for people who are trying to resist tempting foods. Individuals who are aware that they are susceptible to eating when exposed to food cues may avoid situations where they encounter tempting food, such as social events, in order to control their dietary intakes.¹⁴² These individuals may feel as though they have the option of either attending social events or maintaining their diet.¹⁴³

4.0 HEALTHY EATING AT WORK

The following example illustrates the social influence on food intake during the workday. Each of these extra foods increases the overall amount of calories, sodium, sugar and fat consumed (**shown in bold**).

Day in the life of an office worker

8:00 A.M. The morning starts off in a rush, which leaves Rachel little time to eat breakfast. She quickly grabs a packet of instant oatmeal and heads out the door.

8:15 A.M. Rachel arrives at work with some time to spare. She stops by the lunch room to prepare the oatmeal and fills up her coffee from the coffee machine.

8:25 A.M. On her way to her desk, Rachel runs into Louise who is decorating her desk with green paraphernalia. Louise fills up her candy bowl with green **jelly beans** and offers Rachel some, then places it on the communal filing cabinet.

8:30 A.M. Rachel arrives at her desk and eats her oatmeal while scanning through emails. According to Louise, there are **jelly beans** and **cupcakes** on the communal filing cabinet in celebration of St Patrick's Day. An email from Mary indicates that the office will be celebrating Philip's birthday this afternoon.

10:30 A.M. Rachel attends a meeting that will be going until at least 12:00. Someone brought in **mini donuts** and Rachel eats a few.

12:30 P.M. Rachel heads back to her desk to sift through the emails that accumulated during the morning. She will not have much time for lunch as she has another meeting in the afternoon. She quickly eats her lunch at her desk.

1:00 P.M. Rachel attends an afternoon meeting. Her manager has brought in a **coffee with cream and sugar** for each person in the meeting to acknowledge their hard work.

3:30 P.M. The meeting ends and the staff make their way to the lunch room to celebrate Philip's birthday. Halley is an amazing baker who has prepared a cake. There was fruit on the side, but it did not last long and Rachel missed out. She asks for a small **slice of cake**, thinking about the other treats she had today.

3:45 P.M. Rachel heads back to her desk feeling sluggish. She works away completing tasks and catching up on emails from the afternoon.

4:30 P.M. It's the end of the work day. Rachel is exhausted. She feels like she should pick up groceries but is not feeling up to facing the crowd at the grocery store. Instead, a group of co-workers has invited her out for dinner at a local **fast food** restaurant. She will have to go grocery shopping another day.

4.0 HEALTHY EATING AT WORK

Individual Psychological Factors

There are many complex psychological processes that occur that prevent individuals from taking action to improve their own diet.^{118,144-148} For example, people accept the messages in health promotion campaigns but typically believe them to be more applicable to others than to themselves. This occurs because people usually rate risks related to their own behaviour to be lower compared to others.^{149,150} This can result in individuals feeling that dietary improvements are ‘everyone else’s problem’, while believing that their own diet is ‘ok’.²⁰ For example, a survey revealed that most Canadians report their eating habits as good (46%), very good (24%), or excellent (4%).¹⁵¹ However, only 0.5% of Canadians met nutrition recommendations and the average Canadian diet (58.8 out of 100 points) was closer to the ‘poor’ diet category than to the ‘good’ diet category.¹ Only 7% of respondents rated their own diet as ‘poor’; however, based on population data, 17% of the Canadian population consumed a diet categorized as ‘poor’.^{1,151}

When individuals are provided with an opportunity to consume tempting food they often rationalize their decision to eat in order to feel less guilty.^{114,127} This can occur after resisting tempting food earlier in the day or after achieving a goal that required personal effort, for example, eating something indulgent after exercising or eating out after a tough day at work. This can also occur when eating foods that are marketed as healthy, such as consuming larger amounts than normal because a product is ‘low-fat’, ordering a high calorie dessert with a ‘healthier’ choice or eating more calories after selecting a sugar-free beverage.^{114,115,127,144,148-152}

Environmental Factors

The food environment has changed substantially in the past few decades, including increased portion sizes as well as widespread availability and promotion of less healthy foods described as “*Foods to Limit*” by *Canada’s Food Guide*.^{27,49,61,64,66,67,152-159} The presence of tempting foods in the day-to-day environment has been shown to increase consumption.^{64,66,67,94,97,160-165} In retail settings, sales can be increased by prominently displaying items using methods such as increasing shelf space, placing items at eye level and using end-of-aisle and check-out displays.⁶⁴ This practice is effective at increasing sales even when items are generally unpopular.⁶⁴

Currently, food and beverages provided in the workplace during meetings, events and celebrations, through retail settings such as vending machines, cafeterias and tuck shops, or left in common work areas, offer employees regular access to “*Foods to Limit*”. These foods tend to be highly accessible and prominently displayed in workplace retail settings and in work areas, which can promote consumption.

4.0 HEALTHY EATING AT WORK

The following example illustrates the influence of the workplace on the dietary intakes of employees. Each of these “*Foods to Limit*” increases the overall amount of calories, sodium, sugar and fat consumed and displaces healthier food from the diet (**shown in bold**).

Day in the life of a factory shift worker

5:15 P.M. Brad was unable to sleep during the day today as he had been working days previously this week and ended up sleeping in. He has been working a lot of overtime and has not had a chance to go grocery shopping. Brad stops and orders a **fast food meal combo** from a drive through restaurant on his way to work. He eats his meal in the car in the parking lot at work before his shift starts.

8:00 P.M. During his first 10 minute break Brad is already tired and has an **energy drink** from an on-site vending machine. He used to avoid energy drinks and coffee, but has noticed that these seem to have become a staple in his diet since he began working rotating shifts.

10:00 P.M. Brad purchases his lunch from the vending machines as the cafeteria is not open during the night shift. He has been meaning to ask his supervisor about providing a refrigerator for staff to store meals from home. Brad chooses a **submarine sandwich**, a **bag of chips** and a **can of fruit punch**.

2:00 A.M. Brad is feeling unwell and has some stomach upset. He uses his second meal break to take a nap.

4:00 A.M. Brad was planning to go to the gym after work and tries to find a healthy snack. He chooses a **chocolate milkshake** and an **oatmeal cookie** from the vending machines – the healthiest options he can find.

6:00 A.M. By the end of his shift Brad is exhausted. He decides to forgo his planned trip to the gym after work. He grabs a **coffee with cream and sugar** before leaving work to keep him alert for the drive home.



4.0 HEALTHY EATING AT WORK

4.4 Nutrition Standards in Workplaces: A Critical Need

The current food environment promotes dietary patterns that are associated with poor health. Interventions must move beyond traditional educational approaches to provide supportive healthy eating environments. Workplaces can positively influence the nutritional intakes of employees by addressing the nutritional quality of food offered to employees.

The OSNPPH recommends using *Nutrition Standards for Workplaces*® to guide what food and beverages are offered in workplace settings (See Appendix A).

The *Nutrition Standards for Workplaces*® can apply whenever food and beverages are offered or sold in the workplace. The *Nutrition Standards for Workplaces*® are not intended to apply to foods and beverages brought in for individual consumption (i.e., packed lunches).

The *Nutrition Standards for Workplaces*® translate evidence-based nutrition recommendations, such as those in *Canada's Food Guide*²⁷, into nutrition standards workplaces can use to assess the nutritional value of available ingredients and packaged products. Using a nutrition standard ensures that food and beverages offered in workplace settings are part of *Canada's Food Guide*, are higher in nutrients such as vitamins, minerals and fibre and contain little or no added fat, sugar or salt.

Using consistent nutrition standards in the workplace:

- **Capitalizes on the workplace as an ideal setting to promote healthy eating.** Most employed Canadian adults spend at least 60% of their waking hours at work and eat at least one meal during the workday.²
- **Ensures consistency between wellness messaging and workplace practice.** Often workplaces encourage healthier eating habits using educational approaches. In many cases employees are offered or sold less healthy food choices during the workday, which can undermine their health.
- **Improves the nutritional quality of foods available to employees.** The implementation of the *Nutrition Standards for Workplaces*® will provide an eating environment where the healthy choice is the easy choice.¹⁶⁶⁻¹⁷²

4.5 Nutrition Promotion Within The Comprehensive Workplace Health Model

Comprehensive Workplace Health Promotion can be defined as “an approach to protecting and enhancing the health of employees that relies and builds upon the efforts of employers to create a supportive management under and upon the efforts of employees to care for their own well-being”.¹⁷³

The OSNPPH's vision is that Ontario workplaces will recognize that employee health is fundamental to organizational success, and will therefore adopt and implement a comprehensive approach to workplace health as an integral part of their business strategy and operations.

The Comprehensive Workplace Health (CWH) Model focuses on three areas: organizational culture, health and lifestyle practices and occupational health and safety.¹⁷⁴

- **Organizational Culture** includes psychosocial issues in the workplace environment. It focuses on factors that affect the interaction between people, their work and the organization.
- **Health and Lifestyle Practices** include individual behaviours and organizational strategies to improve individual health.

4.0 HEALTHY EATING AT WORK

- **Occupational Health and Safety** includes reducing work-related injury, illness and disability by addressing the physical environment and other aspects of the workplace environment.

Initiatives for each of these areas can include: awareness raising, skill building, supportive environments and policy development.

Creating a Healthy Workplace Nutrition Environment: The Nine Essential Elements

The OSNPPH identifies nine elements that are essential to a Healthy Workplace Nutrition Environment. The nine essential elements incorporate the *Nutrition Standards for Workplaces*[®], which are intended to be used as part of a comprehensive health promotion approach to create a healthy eating environment in workplaces.

The nine essential elements of a Healthy Workplace Nutrition Environment align with the Comprehensive Workplace Health Model (see Fig. 1). Each of the nine essential elements can be placed within one of the three areas of the Comprehensive Workplace Health Model.

The nine essential elements are:

1. Organizational commitment to a positive healthy eating culture.
2. Supportive social eating environment.
3. Supportive physical eating environment.
4. Access to healthy, reasonably priced, culturally appropriate food.
5. Credible nutrition education and social support for employees and their families.
6. Nutrition education for key decision makers and intermediaries provided by a Registered Dietitian.
7. Access to services from a Registered Dietitian.
8. Safe food practices and accommodation of special dietary needs.
9. Nutrition policies that encourage healthy eating.



4.0 HEALTHY EATING AT WORK

Figure 1: Adapted Comprehensive Workplace Health Model with Nine Essential Elements¹⁷⁴

Organizational Culture

1. Organizational commitment to a positive healthy eating culture
2. Supportive social eating environment
6. Nutrition education for key decision makers and intermediaries provided by a Registered Dietitian
9. Nutrition policies that encourage healthy eating

Health and Lifestyle Practices

5. Credible nutrition education and social support for employees and their families
7. Access to services from a Registered Dietitian



Occupational Health and Safety

3. Supportive physical eating environment
4. Access to healthy, reasonably priced, culturally appropriate food
8. Safe food practices and accommodation of special dietary needs (e.g., allergies, traditional dietary practices)

5.0 ESSENTIAL ELEMENTS OF A HEALTHY WORKPLACE NUTRITION ENVIRONMENT

5.0 Essential Elements of a Healthy Workplace Nutrition Environment

Essential Element 1: Organizational Commitment To a Positive Healthy Eating Culture

Organizational commitment is the ongoing commitment of managers and relevant stakeholders to create a workplace environment that supports and fosters a culture of healthy eating. This element can be achieved by a) obtaining management support, b) establishing a wellness committee, c) addressing weight bias in the workplace and d) being involved in the community.

A. Management Support for the Creation of a Healthy Workplace Nutrition Environment

Definition of Success: *Management formally commits to achieving a Healthy Workplace Nutrition Environment based on the nine essential elements.*

To create a healthy workplace, it is important that everyone in the organization is working towards a common goal. The most important part of any organizational change is management commitment to achieving a Healthy Workplace Nutrition Environment.^{175,176}

Management commitment, supervisory support and supportive organizational structures are required for successful initiatives.³² Without management buy-in, health promotion initiatives may be forced to compete against organizational priorities such as production and profitability. Obtaining senior management support is essential to generate resources such as employee time and financial support required to initiate and maintain successful wellness programs.¹⁷⁷ Without this commitment, the chances of success are significantly reduced.

Management support is required to address organizational factors that affect employee eating habits such as work related stress and work schedules, which can negatively affect food choices.^{178,179} For example, time scarcity due to long work hours, multiple jobs or shift work may result in lower quality diets among working families.^{180,181} Many working adults find it difficult to manage time constraints related to work, making convenient access to healthy options especially important.¹⁸²

Management can also act as wellness champions by role modelling healthy behaviours for employees. This demonstrates commitment to healthy eating initiatives and can also positively influence employee behaviours.^{125,127, 128, 133}

Demonstrating the costs and savings associated with a Healthy Workplace Nutrition Environment is one way of obtaining management buy-in. For example, overall workplace financial losses related to chronic disease range from as low as a few hundred dollars^{4,15,183,184} to several thousand dollars per affected employee per year (e.g., \$3000 to \$15000).^{4,14,185,186} A recent meta-analysis, that looked at the costs and savings associated with workplace disease prevention and wellness programs in general, determined that medical costs fall by about \$3.27 for every dollar spent on wellness programs and that absenteeism costs decrease by about \$2.73 for every dollar spent.¹⁸⁷

5.0 ESSENTIAL ELEMENTS OF A HEALTHY WORKPLACE NUTRITION ENVIRONMENT

A systematic review on the financial return of nutrition focused health promotion programs found a return on investment in some studies but not others.¹⁸⁸ However, the majority of the studies in the review were focused on individual behaviour change and did not include improvements to the food environment.¹⁸⁸ Therefore, specific conclusions on the profitability of the strategies promoted in the *Call to Action for Workplaces* cannot be made without further research.

B. Establishing a Wellness Committee

Definition of Success: *A wellness committee/ healthy eating subgroup is established and committed to the task of creating a Healthy Workplace Nutrition Environment.*

A wellness committee is responsible for conducting health needs and interest assessments, organizing awareness raising and skill building activities, planning supportive environment interventions, assisting with the implementation of activities, drafting policies for management approval and evaluating outcomes.

Successful workplace health initiatives often indicate that program acceptance was achieved using a committee approach.¹⁸⁹⁻¹⁹³ A committee approach is helpful to exchange ideas between employees, service providers, wellness staff and management.¹⁷⁷ Workplaces should involve all relevant stakeholders such as: senior management, unions and employee associations, employees, occupational health, health and safety representatives, human resources and benefits, communications and food service providers, so that committee decisions will consider different perspectives.

C. Addressing Weight Bias in the Workplace

Definition of Success: *Management acknowledges weight bias as being unacceptable in the workplace and supports efforts to address and prevent it within the organization.*

Typical awareness raising strategies on the topic of healthy weights using the ‘eat less, do more’ approach have emphasized individual personal responsibility, while failing to acknowledge the environmental factors that have contributed to poor eating habits. It is a common perception that individuals are solely responsible for their eating and physical activity behaviours.^{41,194-200}

*“Weight bias refers to negative stereotypes toward individuals affected by excess weight or obesity, which often leads to prejudice and discrimination. Weight bias toward individuals affected by obesity is evident in healthcare, education, the media, interpersonal relationships and especially in the workplace.”*²⁰¹

Overweight and obese workers can face disadvantages in wages, hiring, promotions and job termination because of their weight status.^{195,199,200,202-208} As such, employers should ensure that recruitment and retention practices reflect an inclusive philosophy and are not based on weight status.

*“Weight bias fosters blame and intolerance that reduces quality of life for persons who are affected by obesity. Individuals who experience weight bias or discrimination are at risk for serious psychological, emotional and health-related consequences, some of which also reinforce weight gain and obesity.”*²⁰¹ The experience of stigma increases stress levels and depletes the mental energy required to regulate eating and physical activity behaviours.²⁰⁹ As a result, individuals who experience weight-based stigma are more likely to engage in unhealthy eating behaviours and lower levels of physical activity.^{198,199,203,209,210}

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Workplaces should ensure that efforts to improve employees' dietary intakes do not perpetuate or exacerbate weight-based stigma and discrimination. For example, focusing information and education solely on individual aspects of weight gain such as diet and exercise may increase weight bias.^{198,200,207,211-213}

Workplaces should avoid using shaming as a method to motivate individuals to lose weight or using images in wellness communications that depict individuals in a negative or stigmatizing manner (e.g., focus on torso or buttocks, headless shots, people shown eating or drinking or engaging in sedentary behaviours).^{195,212,213} Interventions that target specific groups to improve dietary intakes (e.g., overweight or obese individuals) can also be stigmatizing. For example, participating in weight loss contests that have become popular as a result of reality based television shows such as the *'Biggest Loser®'* can promote anti-fat attitudes and may increase weight bias and stigma among employees.²¹⁴

Workplaces can reduce weight bias by educating employees on the environmental, genetic and biological factors that influence individual eating habits.^{196,198,205,207,215} Also, workplaces can work towards improving the dietary intakes of employees by focusing on environmental factors and whole group approaches.²¹⁶ In addition, workplaces can use education and workplace policies to reduce weight-based teasing and discrimination among employees.

D. Community Involvement

Definition of Success: *The workplace makes an effort to improve the wellbeing of the surrounding community in line with its healthy eating messaging.*

Often workplaces will make efforts to improve the wellbeing of the surrounding community. Participating in community causes gives employees a sense of pride and accomplishment.

One of the ways that workplaces support community needs is conducting food drives for food banks or fundraisers for community charities.

However, fundraisers often rely on the sale of less healthy food options. When tempting food is used to raise money, it can be very difficult for employees to resist. It may also lead to rationalization where the act of eating something that is less healthy is done for altruistic reasons (e.g., 'I will buy these cookies to support a good cause'). Additionally the amount and types of food distributed through the food bank is often inadequate to meet recipients' nutritional needs.²¹⁷

Whenever possible, involvement with the community should demonstrate the workplace's commitment to healthy eating. Improvements can be made by collecting healthier food items to donate to local food banks and using non-food items to raise funds.

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Table 1 outlines recommendations for action by key stakeholders to achieve Essential Element 1

Table 1: Essential Element 1: Organizational Commitment to a Positive Healthy Eating Culture	
A. Management Support <i>Management formally commits to achieving a Healthy Workplace Nutrition Environment based on the nine essential elements.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Make a commitment to healthy eating in the vision and mission of the organization. Address organizational factors that may negatively affect eating habits (e.g., workload, scheduling practices, workplace conflict, etc.). Ensure management representation on the wellness committee/healthy eating sub-group. Support guiding principles, which outline the approach to healthy eating and key messages used to promote healthy eating in the workplace. Participate and encourage staff to participate in educational opportunities (e.g., awareness raising and skill building) on work time. When hosting activities that involve the local community, role model healthy eating behaviours (e.g., healthy choices at a community BBQ). Partner with community groups that also promote healthy eating behaviours (e.g., Heart and Stroke, Canadian Cancer Society, public health departments/units, etc.). Follow policies that support healthy eating. Encourage managers to demonstrate commitment to healthy eating (e.g., being a good role model and supporting healthy eating messages).
Unions	<ul style="list-style-type: none"> Support workplace efforts to create a Healthy Workplace Nutrition Environment. Create buy-in among employees towards workplace efforts to create a Healthy Workplace Nutrition Environment. Identify representatives to participate on the workplace wellness committee/healthy eating subgroup.
Group Benefits Insurance Companies	<ul style="list-style-type: none"> Provide a financial incentive to workplaces (i.e., premium incentives) that commit to creating a Healthy Workplace Nutrition Environment by implementing all nine essential elements.
Provincial Government	<ul style="list-style-type: none"> Provide a financial incentive (i.e., tax incentives) to workplaces that commit to creating a Healthy Workplace Nutrition Environment by implementing all nine essential elements.
B. Establishing a Wellness Committee <i>A wellness committee/ healthy eating subgroup is established and committed to the task of creating a Healthy Workplace Nutrition Environment.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Establish a wellness committee/healthy eating sub group responsible for conducting health needs and interest assessments, planning, implementing and evaluating healthy eating interventions.
Unions	<ul style="list-style-type: none"> Participate in wellness committees.

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C. Addressing Weight Bias in the Workplace <i>Management acknowledges weight bias as being unacceptable in the workplace and supports efforts to address and prevent it within the organization.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> • Ensure that workplace recruitment and retention practices reflect an inclusive philosophy. • Provide ongoing awareness raising activities (e.g., in-services for new employees, print resources displayed in common areas) that highlight the negative effects of weight-based stigma and provide strategies for avoiding it in the workplace. • Provide education for employees on the environmental, genetic and social influences on weight status during health promotion activities to decrease weight bias. • Discourage activities such as contests, events or challenges that promote weight bias (e.g., <i>Biggest Loser</i>® weight loss challenges). • Prepare a harassment prevention policy and develop an implementation plan, which provides employees with information and instruction on the contents of the workplace harassment policy. • Use positive portrayals of overweight and obese individuals in company documents, newsletters, websites and other audiovisual communications.
Unions	<ul style="list-style-type: none"> • Support management initiatives to decrease weight-based stigma in the workplace (e.g., union newsletters, education sessions, meetings, etc.).
Provincial Government	<ul style="list-style-type: none"> • Amend the Ontario Human Rights Code to include weight status in addition to race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, age, record of offences, marital status, family status or disability.
D. Community Involvement <i>The workplace contributes to the health of the community by role modelling and promoting inclusive, respectful and evidence-based healthy messaging.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> • Improve the nutritional quality of charitable food donations by emphasizing foods from the “Maximum Nutritional Value” and “Sell/Offer Most” categories, such as fresh or canned fruits, vegetables, milk and alternatives and meat and alternatives during food drives. • Assess requests and support community organizations and fundraisers that also support healthy eating recommendations (i.e., fundraising either involves non-food activities such as walk-a-thons or the sale of non-food items such as gift wrap or magazines). Alternatively, if food is sold for fundraising purposes, only “Maximum Nutritional Value” and “Sell/Offer Most” food is used. • Encourage employees to refrain from selling food that is “Not Recommended” in the workplace on behalf of external organizations (e.g., charities, non-profit organizations, schools, sport teams, etc.).

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Public Health
<ul style="list-style-type: none"> Educate managers and other stakeholders about the benefits of Healthy Workplace Nutrition Environments to create buy-in. Offer support and resources to management and wellness committees to create and maintain a Healthy Workplace Nutrition Environment. Assist workplaces to develop and review policies and guidelines related to community partnerships to ensure they promote healthy eating. Provide resources and strategies to workplaces to reduce weight-based stigma. Promote community awareness about the importance of a Healthy Workplace Nutrition Environment. Advocate for amendments to the Ontario Human Rights code to include weight status in addition to race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, age, record of offences, marital status, family status or disability.

Essential Element 2: Supportive Social Eating Environment

A supportive social eating environment is one where day-to-day interactions in the workplace support healthy eating behaviours and do not encourage increased consumption of less healthy foods. This element can be achieved by a) scheduling appropriate breaks, b) not using food as an incentive or a reward, c) ensuring common areas are not used as a repository for food, d) having healthy employee celebrations and e) ensuring that fundraisers support healthy eating.

Changing the social norms related to eating behaviours may be the most challenging task as employees may be resistant to changes in this area. Workplaces are encouraged to set goals related to the social eating environment and work with employees to transition towards that goal. Part of the transition strategy should include education so that employees understand the social, psychological, physiological and environmental determinants of individual eating behaviours, while reducing the emphasis on individual responsibility.

Making Changes in the Workplace: The Tobacco Example

Changing social norms around health behaviours may seem daunting at first; however, the regulations around tobacco have demonstrated that employees adjust to change. For example, 30 years ago it would have seemed completely normal to smoke tobacco in the workplace. Twenty years ago employees were permitted to smoke in a designated area within the workplace.²¹⁸ As of 2006 the Smoke-free Ontario Act came into effect, which banned smoking in workplaces.²¹⁹ Six years later, most Ontarians would find it strange to encounter tobacco smoke in their workplace.

A. Appropriate Breaks

Definition of Success: *Breaks are appropriately scheduled in order to provide employees with a minimum 30 minute lunch break.*

Eating at regular intervals allows people to refuel, which can help them achieve work tasks more effectively.³¹ Individuals with diabetes will benefit from regular nutrition breaks as it will help them to manage blood sugar.

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B. Use of Food as an Incentive or a Reward

Definition of Success: *Food is not used as an incentive or a reward to recognize employees' work efforts.*

When food is used as a reward it encourages eating for reasons aside from hunger. This practice can also create a conditioned response, where work creates anticipation and expectation of food rewards and may encourage individuals to rationalize indulgent food decisions (e.g., 'I had a hard day at work today, so I deserve something indulgent').^{83,129,131}

C. Food in Common Areas

Definition of Success: *Common areas in workplaces are free from food and the workplace is not used as a repository for foods that are "Not Recommended" (e.g., leftover food from meetings, Halloween candy, Christmas cookies, etc.).*

In many workplaces, employees bring in 'treats' for co-workers to share. Leftover food from meetings and events is often placed in common areas for people to consume. Additionally, fundraisers based on selling "*Foods to Limit*" are typically placed in common areas for people to purchase.²⁷ Candy dishes on desks are also an example of food offered in common areas.

This practice may seem relatively harmless; however, the caloric margin for 'treats' is very small, with experts estimating that it only takes 50 to 150 extra calories per day to cause an individual to become obese.^{64,65,153,220-222} Therefore, the placement of food in common areas can make a significant negative impact on the health of employees.

The presence of less healthy foods in work settings can be extremely distracting for workers, and there is evidence that individuals have difficulty doing more than one task requiring self control at a time.^{65,105,106,109,120,223} This creates a scenario where people exposed to tempting foods in their work areas will either eat the 'treat' and get on with their work (potentially increasing diet related health risks) or try to resist to maintain their health, resulting in distracted and less productive employees.

Having regular access to food in the work area may also create a habit of rewarding oneself to cope with boredom or stress in the workplace.^{123,224}

D. Workplace Celebrations

Definition of Success: *Employees are encouraged to have celebrations that support healthy eating.*

The frequency of events is coordinated to limit the number of celebrations that involve foods that are "Not Recommended".

Often, celebrations are a time to share food with friends, family and colleagues. Celebrations can be an important part of acknowledging workplace successes and important life milestones. However, if workplace celebrations occur frequently, and "*Foods to Limit*" are commonly offered, celebrations may begin to compromise diet quality and overall health.

Holiday celebrations are a time when cultural, environmental and social influences combine, to make it more likely that people will gain weight.²²⁵ Individuals have noted that holidays and parties create a negative social influence that encourages poor eating habits.¹³⁶ Factors that occur during celebrations such as eating with others, longer meal times, easy access to tempting food and large portion sizes, tend to increase overall caloric intake.²²⁵

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E. Workplace Fundraisers

Definition of Success: *Fundraising supports and encourages healthy eating.*

Fundraisers occur within the workplace for various purposes (e.g., to raise funds for social committees or fitness equipment, to assist employees in times of personal need, etc.). Often, fundraising efforts rely on the sale of less healthy foods (e.g., bake sales, chocolates), which can contribute to poor diet quality.

Table 2 outlines recommendations for action by key stakeholders to achieve Essential Element 2.

Table 2: Essential Element 2: Supportive Social Eating Environment	
A. Appropriate Breaks <i>Breaks are appropriately scheduled in order to provide employees with a minimum 30 minute lunch break.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Communicate with employees to coordinate appropriate breaks. Most employees are entitled to an uninterrupted 30 minute eating period after no more than five consecutive hours of work.²²⁶
B. Use of Food as an Incentive or a Reward <i>Food is not used as an incentive or a reward to recognize employees' work efforts.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Reward employees with non-food rewards (e.g., gift cards, special events such as a bowling party, afternoon off, etc.).
C. Food in Common Areas <i>Common areas in workplaces are free from food and the workplace is not used as a repository for foods that are "Not Recommended" (e.g., leftover food from meetings, Halloween candy, Christmas cookies).</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Make common areas in work places free from food and ensure the workplace is not used as a repository for foods that are "Not Recommended" (e.g., leftover food from meetings, Halloween candy, Christmas cookies).
D. Workplace Celebrations <i>Employees are encouraged to have celebrations that support healthy eating. The frequency of events is coordinated to limit the number of celebrations that involve foods that are "Not Recommended".</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Coordinate the frequency of events to limit the number of celebrations. Make efforts to emphasize food and beverages from the "Maximum Nutritional Value" and "Sell/Offer Most" categories and minimize food and beverages from the "Not Recommended" category.

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E. Workplace Fundraisers <i>Fundraising supports and encourages healthy eating.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Raise funds through non-food activities such as walk-a-thons or the sale of non-food items (e.g., gift wrap or magazines). Alternatively, if food is sold for fundraising purposes, only “Maximum Nutritional Value” or “Sell/Offer Most” foods are used.
Public Health	
<ul style="list-style-type: none"> Provide resources and strategies to workplaces to create a supportive social eating environment, such as suggestions for meal breaks, healthy celebrations, fundraisers and incentives that support healthy eating. Provide education to employees to increase support for a supportive social eating environment. 	

Essential Element 3: Supportive Physical Eating Environment

A supportive physical eating environment encourages employees to make time for breaks and to bring their lunch from home. This element can be achieved by providing a safe and pleasant eating area.

Safe and Pleasant Eating Areas

Definition of Success: *The physical set up of the workplace provides a clean, attractive eating area that encourages and supports employees to bring their own meals, snacks and beverages.*

To encourage employees to take their lunch breaks and consume meals and snacks, some of the physical aspects of the workplace eating environment can be addressed to create a clean attractive eating area.

Table 3 outlines recommendations for action by key stakeholders to achieve Essential Element 3.

Table 3: Essential Element 3: Supportive Physical Eating Environment	
Safe and Pleasant Eating Areas <i>The physical set up of the workplace provides a clean, attractive eating area that encourages and supports employees to bring their own meals, snacks and beverages.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Provide a place to eat that is not in need of repairs (e.g., chipped floor covering, loose tiles, damaged chairs, etc.). Improve the atmosphere of the cafeteria or employee lounge to create a more supportive eating environment. Ensure adequate seating with no overcrowding beyond the established room capacity. Provide tables and chairs that are the appropriate size for all employees. Ensure daily cleaning of tables and floors. Provide access to food storage and food preparation equipment where employees can store or reheat snacks, lunches and beverages. Provide appropriate shade for any available outdoor lunch seating. Provide adequate, clean and pest proof bins for waste, recycling and compost (where applicable).
Public Health	
<ul style="list-style-type: none"> Provide strategies to workplaces to create a supportive physical eating environment. 	

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Essential Element 4: Access To Healthy, Reasonably Priced, Culturally Appropriate Food

Ensuring access to healthy, reasonably priced and culturally appropriate food increases the chance that employees will select healthy foods. This element can be achieved by a) ensuring access to these foods in retail settings and b) during catered meetings and special events.

A. Retail Settings (i.e., food sold in cafeterias, tuck shops, canteens and vending machines)

Definition of Success: *Food sold in cafeterias, tuck shops, canteens and vending machines comply with the Nutrition Standards for Workplaces[©] and healthy food is competitively priced and promoted. In all settings, food must reflect cultural diversity in the workplace.*

Retail environments can influence employees to consume a poor quality diet if there is an abundance of less healthy choices, and if healthy choices are more expensive or less convenient than other choices. Many interventions in retail settings attempt to encourage individuals to consume healthier foods by increasing access to healthier choices, point of purchase prompts, food labelling and nutrition education.^{32,179,192,227-229} Some interventions also incorporate pricing incentives, which tend to be more successful than interventions based on education and healthy eating prompts.²³⁰⁻²³⁵

However, these interventions place the onus on the individual to consume a healthy diet in an environment that also promotes foods that can be detrimental to health. This strategy ignores the powerful reward stimulus of the presence of tempting foods as well as the limitations of individual ability to consistently resist these foods to protect long term health.^{64,65,70,76,82,84-91} It is likely due to the physiological processes that favour the consumption of “Foods to Limit” that healthy eating interventions focused on individual behaviour change fail to have significant long term impact. Workplaces can improve employees’ diets by improving the nutritional quality of food sold to employees in retail settings.

In addition to addressing the nutritional quality of food sold to employees, workplaces may also want to consider the environmental impact of their food service operations.

One way to reduce environmental impact is to source a portion of food products from local food producers (e.g., Ontario). Buying local food supports farmers, food processors and retailers, which helps to strengthen the local economy. Buying local also helps to protect the environment by reducing carbon emissions that result from packaging and transporting food from distant locations.²³⁶

Many workplaces are also sourcing organic foods for their food service operations. There are many reasons to purchase organic foods such as reducing exposure to pesticides and antibiotic-resistant bacteria, concerns about animal welfare and genetically modified foods and the effects of conventional farming methods on the environment.²³⁷⁻²⁴⁰ Organic foods are not necessarily nutritionally superior to foods grown using conventional farming methods as commonly believed.²⁴⁰⁻²⁴² However, purchasing locally produced organic food, in season, can help to reduce environmental impacts related to food production.

Employees come from many cultural backgrounds (e.g., ethnicity, country of origin, religion, etc.). Many cultures have traditions that involve specific food practices (e.g., Halal, Kosher, vegetarianism, etc.). In order to be culturally inclusive, workplaces should provide culturally appropriate foods that reflect the cultural diversity in their workplace.

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B. Catered Meetings/Special Events

Definition of Success: *Workplace meetings and events demonstrate a commitment to employee health and well-being by incorporating healthy eating and supporting environmentally friendly initiatives.*

If food is offered to employees above and beyond what they normally consume in a workday, it may contribute to excess caloric consumption and poor diet quality, especially if foods offered are “Foods to Limit”.^{220,221} Food presented during meetings may also make it more difficult for employees to concentrate on working.⁶⁵

Table 4 outlines recommendations for action by key stakeholders to achieve Essential Element 4.

Table 4: Essential Element 4: Access To Healthy, Reasonably Priced, Culturally Appropriate Food	
A. Retail Settings	
<i>Food sold in cafeterias, tuck shops, canteens and vending machines comply with the Nutrition Standards for Workplaces[®] and healthy food is competitively priced and promoted. In all settings, food must reflect cultural diversity in the workplace.</i>	
Recommendations for Action:	
Employers	<p>Employers work with food service providers to create healthy workplace cafeteria/tuck shop/café/vending machines to:</p> <ul style="list-style-type: none"> • Emphasize food and beverages from the “Maximum Nutritional Value” and “Sell/Offer Most” categories (i.e., include at least 80% of choices from the “Maximum Nutritional Value” and “Sell/Offer Most” categories). • Plan meals that include at least three of the four Food Groups from <i>Canada’s Food Guide</i>. • Offer food and beverages that consider diverse dietary needs, including traditional dietary practices and special dietary needs (e.g., allergies and medical conditions). • Offer Ontario grown and produced food when available and practical. Purchase food locally where possible (e.g., local farmers’ markets, local grocery stores).²⁴³ • Use pricing, product placement and promotional strategies to market and encourage the selection of the healthiest choices in workplace cafeteria/tuck shop/café/vending machines.
Food Distributors	<ul style="list-style-type: none"> • Offer products that meet the criteria for “Maximum Nutritional Value” and “Sell/Offer Most” as standard formulary items available to food service operators. • Offer products that meet the criteria for “Maximum Nutritional Value” and “Sell/Offer Most” for the same or lower price than other comparable food items that do not meet these criteria.
Group Benefits Insurance Companies	<ul style="list-style-type: none"> • Provide a financial incentive to workplaces (i.e., premium incentives) who implement the <i>Nutrition Standards for Workplaces[®]</i> in retail settings.

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B. Catered Meetings/Special Events <i>Workplace meetings and events demonstrate a commitment to employee health and well-being by incorporating healthy eating and supporting environmentally friendly initiatives.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Avoid serving food during meetings when it is not required (e.g., when the meeting occurs mid-morning or mid-afternoon and does not extend through a meal period). Have facilities for employees to wash their hands before eating. If food and beverages are served at meetings, events, catered lunches, or celebrations, emphasize food from the “<i>Maximum Nutritional Value</i>” and “<i>Sell/Offer Most</i>” categories (i.e., 80% of food should come from these two categories), order appropriate portion sizes to prevent leftovers and food waste and remove leftover food promptly after the meal is finished to minimize food safety risks.
Food Service Operators	<ul style="list-style-type: none"> Make alterations to current offerings by making foods in the “<i>Maximum Nutritional Value</i>” category available to workplaces. Identify items that meet the criteria for “<i>Maximum Nutritional Value</i>” and “<i>Sell/Offer Most</i>” to make it easier for workplaces that are purchasing food and beverages for their employees. Make ingredient lists available and indicate possible allergens whenever possible.
Group Benefits Insurance Companies	<ul style="list-style-type: none"> Provide a financial incentive to workplaces (i.e., premium incentives) who implement the <i>Nutrition Standards for Workplaces</i>® during workplace meetings and events.
Public Health	
<ul style="list-style-type: none"> Provide consultation and support to workplaces implementing the <i>Nutrition Standards for Workplaces</i>®. Provide examples of different models for food provision (e.g., salad bar program or contracts with local farmers). Support workplaces in creating and negotiating food service requests for proposal. Work with local food service operators and food distributors to identify foods that fit into “<i>Maximum Nutritional Value</i>” and “<i>Sell/Offer Most</i>” categories. 	



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Essential Element 5: Credible Nutrition Education and Support for Employees and Their Families

Providing credible nutrition education for employees and their families may increase the chances that individuals make healthy choices inside and outside of the workplace. This element can be achieved by providing a) education for employees, b) and their families, as well as c) enhancing workplace social support.

It is important to provide employees and their families with credible nutrition information. Therefore it is recommended that nutrition information has been developed by a Registered Dietitian (RD). RDs are uniquely trained, regulated food and nutrition experts. All RDs in Ontario are members of The College of Dietitians of Ontario. The College exists to regulate and support all RDs in the interest of the public of Ontario. The Registered Dietitian's Code of Ethics, Professional Misconduct Regulation, competency statements and standards of practice establish a level of practice that ensures patient safety and prohibits RDs from undertaking activities for which they are not qualified.

A. Education for Employees

Definition of Success: *Nutrition information and educational opportunities are provided to employees on a regular basis, using a variety of activities.*

Ongoing nutrition education and support can help employees to improve their food literacy i.e., “the ability to make healthy food choices by having the skills and knowledge necessary to buy, grow and cook food, with implications for improving health”.²⁴⁴ Awareness raising efforts such as emails, websites, posters and pamphlets can be used to generate interest in nutrition related topics. Behavioural health promotion programs have been successful in promoting short term improvements in dietary intakes (e.g., a 14 week program).³² Several types of programs have been used including individual counselling, group programs, and technology based programs (e.g., internet and smart phone based applications).^{32,179,228,245-247}

Skill building activities can give employees the skills to make healthier food choices such as label reading, self-monitoring food intake (e.g., food journals or smart phone applications), setting goals, meal planning, food budgeting, cooking skills and gardening skills. Educating employees on the external influences of eating habits such as environmental cues can build support for implementing the *Nutrition Standards for Workplaces*.^{©41,195,198,200,205,207,248}

Workplaces should avoid education efforts that may be detrimental to employee health. For example, there has been an emphasis on encouraging individuals to lose weight in order to decrease risks associated with obesity. The promotion of weight loss is questionable as weight loss is difficult to achieve. People typically lose weight in treatment programs but they usually regain some if not all of the weight within one year.^{141,249} Only 5-20% of individuals who lose weight are successful in maintaining their weight loss.^{92,141,250,251} Four hundred randomized clinical control trials have shown the average amount of maintained weight loss is only 1.0 kg to 6.8 kg (2.2 to 15 pounds) after 5 years.^{249,251-254} Similarly, workplace based trials report a sustained weight loss of only about 1 kg (2.8 pounds) one year post intervention.²⁵⁵ Even surgical interventions have had limited success in achieving long term weight loss.^{251,256} However, weight loss does not always result in better health outcomes and in some cases may increase health risks.^{257,258} Emphasizing weight may also lead to poor body image and dissatisfaction, which can lead to unhealthy weight loss behaviours, poor mental health and social isolation (e.g., avoiding situations such as social events with food).²⁵⁹ Therefore, workplaces are encouraged to promote healthy behaviours (i.e., healthy eating) rather than weight loss.

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B. Education for Families

Definition of Success: *The workplace encourages and supports employees' families to participate in nutrition information and educational opportunities.*

It is in the best interest of organizations to promote health for employees and their families. Employees themselves may not be primarily responsible for household shopping and food preparation. Therefore, it may be helpful to provide education to family members so they have the required knowledge and skills to provide a healthy nutrition environment at home. In addition, social support from family members is a key factor for promoting and sustaining individual health behaviour change.^{136,179,260} Focusing wellness efforts on employees and their families may also help to reduce health related costs of family members as well as employees.²⁶¹

C. Workplace Social Support

Definition of Success: *Employees have access to an ongoing peer support program that encourages healthy eating.*

Peer support groups allow individuals to share similar lived experiences, and individuals in group programs often provide advice and encouragement to one another.²⁶²⁻²⁶⁵ Attending an ongoing peer support group may help motivate employees to meet some of their personal healthy eating goals.^{262,264,265}

Workplaces can organize ongoing informal or formal peer support groups where employees discuss interests (e.g., healthy cooking) or personal goals (e.g., eating more vegetables and fruit) or their experiences living with health conditions (e.g., diabetes, heart disease).



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Table 5 outlines recommendations for action by key stakeholders to achieve Essential Element 5.

Table 5: Essential Element 5: Credible Nutrition Education and Support for Employees and Their Families	
A. Education for Employees <i>Nutrition information and educational opportunities are provided to employees on a regular basis, using a variety of activities.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Offer awareness raising activities to increase employees' knowledge about healthy eating (e.g., to understand what changes need to be made and why changes are needed). Provide skill building opportunities to support employees in building their skills for healthy eating. When offered, nutrition information and educational opportunities should: be accessible to all employees, based on credible nutrition information and when applicable, engage community health promotion partners.
Group Benefits Insurance Companies	<ul style="list-style-type: none"> Provide financial incentives to companies that offer nutrition education for employees as part of a comprehensive approach to promote healthy eating.
B. Education for Families <i>The workplace encourages and supports employees' families to participate in nutrition information and educational opportunities.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Inform employees' families of the educational opportunities and encourage them to attend.
Group Benefits Insurance Companies	<ul style="list-style-type: none"> Provide financial incentives to companies that offer nutrition education for employees' family members as part of a comprehensive approach to promote healthy eating.
C. Workplace Social Support <i>Employees have access to an ongoing peer support program that encourages healthy eating.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Ensure programs incorporate health promotion elements that help individuals succeed in healthy behaviour changes. Evaluate nutrition promotion programs to determine effectiveness.
Public Health	
<ul style="list-style-type: none"> Develop tools and resources to assist workplaces in providing nutrition education (e.g., promote the benefits of healthy eating without focusing on weight). Provide education to employees and their families. Provide guidance to support workplaces in designing and evaluating healthy eating strategies that support behaviour change. 	

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Essential Element 6: Nutrition Education for Key Decision Makers and Intermediaries Provided by a Registered Dietitian

Providing education from a Registered Dietitian ensures that workplace stakeholders have credible information on which to base informed decisions. This element can be achieved by providing education to managers, employees, union representatives, cafeteria operators, wellness providers and other relevant workplace stakeholders.

Education for Key Decision Makers and Intermediaries

Definition of Success: *Nutrition information and educational opportunities (e.g., train-the-trainer) are offered to workplace intermediaries involved in workplace health from a Registered Dietitian.*

Workplace decision makers stakeholders and health intermediaries often make decisions that will have an impact on the overall health of the employee population.

Good decisions are based on accurate information. Before taking action to promote healthy eating, workplaces should consult a Registered Dietitian to offer credible nutrition information and educational opportunities (e.g., train-the-trainer) to influential workplace groups.

Table 6 outlines recommendations for action by key stakeholders to achieve Essential Element 6.

Table 6: Essential Element 6: Nutrition Education for Key Decision Makers and Intermediaries Provided by a Registered Dietitian	
Nutrition Education for Key Decision Makers and Intermediaries Provided by a Registered Dietitian <i>Nutrition information and educational opportunities (e.g., train-the-trainer) are offered to workplace intermediaries involved in workplace health from a Registered Dietitian.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Consult with Registered Dietitians to plan, develop, implement and evaluate healthy eating projects (e.g., to support development of a healthy eating event). Arrange for training of occupational health and safety staff and employees on the wellness committee by a Registered Dietitian (e.g., public health).
Public Health	
<ul style="list-style-type: none"> Provide consultation and make recommendations to workplaces regarding nutrition programming by a Registered Dietitian. 	

Essential Element 7: Access to Dietetic Services

Individuals with chronic diseases or risk factors for chronic disease are better able to manage their conditions after consultation with a Registered Dietitian. This element can be achieved by providing employees with access to a Registered Dietitian.

Access to Dietetic Services

Definition of Success: *Registered Dietitian services are available for employees with chronic disease or other co-morbid conditions (e.g., high cholesterol, high blood pressure, diabetes, obesity, etc.).*

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Registered Dietitians offer services such as nutrition assessments, diet modification and counselling to help individuals achieve nutrition goals.²⁶⁶ Dietitians can assist employees in establishing meals plans, as well as provide education and guidance to individuals and groups on a number of nutrition related health conditions. Currently, there is good evidence that intensive dietitian counselling for adults with certain conditions can improve nutrition related risks, especially when combined with physical activity.^{255,266} However, nutrition counselling is not as effective at promoting healthy eating among adults without identified nutrition risks.²⁶⁶

Many insurance plans cover the services of a Registered Dietitian; however, coverage and amounts payable differ between plans.

Table 7 outlines recommendations for action by key stakeholders to achieve Essential Element 7.

Table 7: Essential Element 7: Access to Dietetic Services	
Access to Dietetic Services <i>Registered Dietitian services are available for employees with chronic disease or other co-morbid conditions (e.g., high cholesterol, high blood pressure, diabetes, obesity etc.).</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Ensure that employee health benefits include access to the services of a Registered Dietitian for high risk employees (i.e., someone who has a chronic condition and is more motivated to change).
Group Benefits Insurance Providers	<ul style="list-style-type: none"> Include access to dietetic services on all workplace insurance policies as part of a comprehensive approach to promote healthy eating.
Public Health	
<ul style="list-style-type: none"> Advocate for workplaces to identify employee interest in accessing the services of a Registered Dietitian (e.g., workplace survey). Provide workplaces with tools for requesting dietetic services from their group benefits insurance provider. 	

Essential Element 8: Safe Food Practices and Accommodation of Special Dietary Needs

Workplaces can reduce health risks related to foodborne illness and food allergies. This element can be achieved by a) adhering to food safety regulations, b) providing food handlers with Food Safety Training and c) ensuring that special dietary needs are accommodated.

A. Adherence to Food Safety Regulations

Definition of Success: *The workplace adheres to food safety regulations.*

Foodborne illness (also known as ‘food poisoning’) occurs when a person gets sick from consuming food that has been contaminated with a harmful micro-organism such as bacteria, parasites or viruses. There are approximately 11 to 13 million cases of food related illness in Canada every year.²⁶⁷

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Employees have the right to assume that the food they purchase from a workplace is safe and suitable for consumption. Foodborne illness is unpleasant at best and at worst, can be fatal. Furthermore, outbreaks of foodborne illness can result in absenteeism, unemployment and litigation. Therefore, it is imperative that organizations adhere to Public Health safety standards and adopt safe practices in the areas of storage, preparation and retail food services.

B. Food Handler Certification

Definition of Success: *In retail settings, at least one full time certified safe food handler is on site.*

Food service operators with at least one full-time staff completing food safety training tend to have better food safety inspection scores compared to operators with no certified staff members.²⁶⁸

C. Accommodating Special Dietary Needs

Definition of Success: *The workplace supports special dietary needs.*

It is estimated that as many as 1.2 million Canadians may be affected by life threatening food allergies.²⁶⁹ Food allergies can affect people of all ages. The food allergens most commonly associated with severe allergic reactions include: peanuts, tree nuts, sesame, soy, seafood, wheat, eggs, milk, mustard and sulphites.²⁷⁰ Additionally, employees may have special dietary needs relating to traditional cultural food practices or due to medical conditions (e.g., celiac disease, high blood pressure, etc.).

The workplace should ensure that individuals with food allergies and special dietary needs have enough information to determine if food contains an allergen or ingredients that are not compliant with their special dietary needs. When food is provided to employees (e.g., meetings and events) they should have the opportunity to identify any allergies or special dietary needs before food is ordered.

Table 8 outlines recommendations for action by key stakeholders to achieve Essential Element 8.

Table 8: Essential Element 8: Safe Food Practices and Accommodation of Special Dietary Needs	
Recommendations for Action:	
A. Adherence To Food Safety Regulations <i>The workplace adheres to food safety regulations.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Ensure all on-site food premises and external caterers that serve the workplace are registered with and regularly inspected by the local public health department/unit and are in compliance with Regulation 562, "Food Premises," as amended under the Health Protection and Promotion Act http://www.e-laws.gov.on.ca/html/reg/english/elaws_regs_900562_e.htm
Food Service Operators	<ul style="list-style-type: none"> Ensure all food and beverages are prepared, served and stored in accordance with Regulation 562 as amended under the Health Protection and Promotion Act.

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B. Food Handler Certification <i>In retail settings at least one full time certified safe food handler is on site.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Ensure that the food service provider has at least one staff member with a current, safe food handling certificate approved by local board of health or public health department/unit (e.g., included as a condition in service contracts).
Food Service Operators	<ul style="list-style-type: none"> Explore options for training and offer employees opportunities to obtain safe food handler certification.
C. Accommodating Special Dietary Needs <i>The workplace supports special dietary needs.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Collaborate with public health to develop and enforce policies regarding allergy safe environments. Ensure that when food is provided, employees have an opportunity to identify their specific dietary needs (e.g., traditional dietary practices, allergies, medical conditions, etc.). Ensure that ingredient lists of all food sold or offered are available and accessible to employees in venues where food is sold.
Food Service Operators	<ul style="list-style-type: none"> Identify ingredients, allergens or other special dietary criteria (e.g., vegetarian).
Public Health	
<ul style="list-style-type: none"> Ensure all food premises are in compliance with Regulation 562. Provide consultation and training for food service personnel on allergy safe and safe food handling practices. Provide support and guidance for development of policies regarding food allergies and food safety. 	



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Essential Element 9: Nutrition Policies that Encourage Healthy Eating

Implementing a nutrition policy demonstrates commitment to healthy eating and creates an enforceable set of expectations for management and employees. This element can be achieved by creating a comprehensive workplace nutrition policy.

Workplace Nutrition Policy

Definition of Success: *A written nutrition policy supports each of the essential elements of a Healthy Workplace Nutrition Environment.*

Policies serve to guide action on an issue by specifying expectations and regulations to achieve a particular outcome.²⁷¹ A workplace nutrition policy is a formal position taken by the workplace that addresses the nine essential elements of a Healthy Workplace Nutrition Environment. Policies differ from guidelines in that a policy has consequences for non-compliance, whereas, guidelines are not a formal position.

Workplace wellness policies demonstrate an organization's commitment to employees' health and well-being. Studies have shown that healthy nutrition policies, such as those limiting the sale of sugar sweetened beverages or artificial trans fat, can significantly improve the food consumption patterns of consumers.²⁷²⁻²⁷⁵

The development, dissemination and maintenance of a workplace nutrition policy are fundamental in creating a Healthy Workplace Nutrition Environment. It is important that the policy reflect a comprehensive approach by supporting each of the essential elements of a Healthy Workplace Nutrition Environment. Once implemented, nutrition policies can offer consistent and accurate nutrition information, increase the availability of healthy food and support employees in making healthy choices.



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Table 9 outlines recommendations for action by key stakeholders to achieve Essential Element 9.

Table 9: Essential Element 9: Nutrition Policies that Encourage Healthy Eating	
Workplace Nutrition Policy <i>A written nutrition policy supports each of the essential elements of a Healthy Workplace Nutrition Environment.</i>	
Recommendations for Action:	
Employers	<ul style="list-style-type: none"> Develop a written nutrition policy that supports each of the other eight essential elements of a Healthy Workplace Nutrition Environment, including: <ol style="list-style-type: none"> Organizational commitment to a positive healthy eating culture. Supportive social eating environment. Supportive physical eating environment. Access to healthy, reasonably priced, culturally appropriate food. Credible nutrition education and social support for employees and their families. Nutrition education for key decision makers and intermediaries provided by a Registered Dietitian. Access to services from a Registered Dietitian. Safe food practices and accommodation of special dietary needs.
Group Benefits Insurance Providers	<ul style="list-style-type: none"> Provide financial incentives to workplaces that implement comprehensive nutrition policies.
Provincial Government	<ul style="list-style-type: none"> Facilitate collaboration between The Ministry of Health and Long-Term Care and The Ministry of Labour to address critical nutrition issues in workplaces. Adopt the <i>Call to Action: Creating a Healthy Workplace Nutrition Environment</i> as a basis for developing and implementing workplace nutrition policies that will reflect the recommended <i>Nutrition Standards for Workplaces</i>[®]. Mandate that workplaces implement nutrition policies that foster a Healthy Workplace Nutrition Environment as defined in the <i>Call to Action: Creating a Healthy Workplace Nutrition Environment</i>.
Public Health	
<ul style="list-style-type: none"> Use the <i>Call to Action: Creating a Healthy Workplace Nutrition Environment</i> to advocate for local and provincial government leadership on issues related to nutrition in the workplace. Use the <i>Call to Action: Creating a Healthy Workplace Nutrition Environment</i> to make workplaces aware of the importance and benefits of creating a Healthy Workplace Nutrition Environment. Allocate appropriate resources such as consultation and training to support workplaces to develop and implement nutrition policies. Work with management representatives and workplace wellness committees to develop, implement and evaluate workplace nutrition policies. Share initiatives within public health regions and collaborate to develop provincial resources and keep messages consistent. 	

6.0 Conclusion

It is difficult for individuals to make long term healthy food choices in the current nutrition environment. A comprehensive approach is needed in workplaces to support healthy individual behaviours and to address factors that negatively influence food intake.

Historically, workplaces have taken responsibility for removing environmental safety hazards with the goal to reduce work related injury, illness and disability.³ However, the onus has been on employees to maintain a healthy diet in food environments that promote poor eating habits.⁴¹ Most healthy workplace eating interventions focus on changing individual eating habits without making improvements to the food environment. Environmental interventions that do exist often stop at ensuring that some healthy choices are available, without addressing the multiple opportunities to consume “*Foods to Limit*” throughout the workday.

A supportive environment goes beyond simply making healthier choices available to employees. In a truly supportive environment, the onus is not solely placed on employees to consistently resist an unhealthy food environment. Improving the nutritional quality of the food environment appears to be a prudent and necessary approach to increase the quality of dietary intakes.^{65,70,83,99,197} Consequently, the types and amounts of food available, and when and where food is offered to people in their work environments should be carefully considered. By limiting the food choices in the workplace to healthier foods, employers are helping to ensure that the healthy choice is the easy choice for their employees.



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