





Okanagan Territory

ACKNOWLEDGEMENT

The Musqueam and Okanagan people have thrived in their respective territories for millennia and have deep understandings of the importance of wellbeing and its connection to all aspects of life. In recognition of this knowledge and because of its location on their ancestral and unceded territories, UBC is working collaboratively with the Musqueam and Okanagan Nations in pursuit of greater wellbeing at UBC and in their communities.



...

A COMMITMENT TO WELLBEING

Enhanced human and ecological wellbeing is essential to the success of all our students, staff, faculty, indigenous peoples, and university neighbours.

UBC Wellbeing is a university-wide priority to engage with our Vancouver and Okanagan campus communities to ask the question: "How can we create happier, healthier, and more sustainable campus communities?"

Cover Page Photo Credits (left to right)

Main Photo: Dietetics students in the culinary lab (Vij's Kitchen). Photo credit: Martin Dee / UBC Communications & Marketing. Top to bottom:

Photo 1: UBC Food Services Executive Chef David Speight. Photo credit: Pat Sam / UBC Student Housing and Hospitality Services.

Photo 2: From farm to table. Produce from UBC Farm being served at an event. Photo credit: Don Erhardt / UBC Communications & Marketing.

Photo 3: A bountiful harvest from the UBC Farm. Photo credit: Jamil Rhajiak / UBC Communications & Marketing.

Photo 4: Piles of pumpkins at UBC Farm. Photo credit: Martin Dee / UBC Communications & Marketing.

Photo 5: UBC students picking up some food prep tips from a chef. Photo credit: Don Erhardt.

Photo 6: Students, staff and faculty enjoy the friendly competition and canapes at UBC's Chef Challenge. Photo credit: Justin Lee.

Photo 7: Students grab a bite to eat from the Hungry Nomad Food Truck. Photo credit: Martin Dee / UBC Communications & Marketing.



Food, friends and fun at UBC's Chef Challenge. Photo credit: Justin Lee

BUILDING WELLBEING THROUGH FOOD AND NUTRITION

UBC is working towards becoming a health promoting university— embedding wellbeing into all aspects of campus culture and leading health promotion and collaboration globally and locally. By championing wellbeing, we help support an environment where our full potential in teaching, learning, research and engagement can be achieved.

Our community has identified **food and nutrition** as one of our priority areas for action.* A Food and Nutrition Working Group, composed of stakeholders from across the university was created to address and inform ways to support this priority.

Some ways you may see this action plan put into practice include:

- Healthier choices made available in food outlets, at events, and in vending machines across campus.
- Development of a made-at-UBC approach to ingredient and allergen labelling.
- More opportunities to engage in learn-to-cook programs.

By becoming a nutritionally sound campus, together we can contribute to the health and wellbeing of our people, places and planet. We hope that you will join us in making this vision a reality for our UBC communities.

— The Food and Nutrition Working Group, UBC Vancouver

Health promotion is understood as "the process of enabling people to increase control over their health and its determinants, and thereby improve their health." ¹

*For example, the UBC Okanagan VOICE 2012, a community participatory action research study, showed that food & nutrition was a major priority area of interest for the community.



Fresh kale harvested from the UBC Farm. Photo credit: Martin Dee / UBC Communications and Marketing

VISION FOR A NUTRITIONALLY SOUND CAMPUS

A nutritionally sound campus increases intake of safe, healthy and sustainable food; supports development of nutrition skills and knowledge; and promotes health and wellbeing for all members of the UBC community.

By UBC community, we refer to students, faculty, staff and campus neighbours.

GOALS

- 1. UBC community members choose to consume at least three different vegetables each day.
- 2. UBC community members choose to drink water to quench their thirst most often.
- 3. UBC community members learn to prepare five UBC signature dishes.
- 4. No member of our community experiences hunger due to severe food insecurity.*

Working towards these goals will contribute to the wellbeing of our UBC community members, supporting them to be more productive and healthy while helping them succeed in their teaching, learning and working environments.

Please refer to the 'Action Framework for Implementating Call to Action 1 at UBC' on page 11 for examples of how these goals will be achieved.

* According to the Provincial Health Services Authority, households are considered to have severe food insecurity if they report disrupted eating patterns and reduced food intake among any household members.



Food, Nutrition and Health students cooking with Vancouver chef Vikram Vij. Photo credit: Don Erhardt / UBC Communications & Marketing

RESEARCH-INFORMED APPROACHES TO FOOD AND NUTRITION

MALNOURISHMENT IS SURPRISINGLY COMMON

Food plays a critical role in health and wellbeing. And yet far too many people around the globe are malnourished because they consume suboptimal diets. Malnutrition may take the form of undernutrition (such as underweight and micronutrient deficiencies) or overnutrition (such as overweight and obesity). Currently, one in three people in the world are malnourished² and dietary factors contribute more to the global burden of disease than any other condition.³ Particularly problematic are diets low in vegetables, fruits, whole grains, nuts and seeds, high in sodium, added sugars, and red or processed meat.³⁻⁶

With 36% of Canadian adults classified as overweight and 26% classified as obese,⁷ overnutrition is particularly evident in Canada. While less common, underweight and micronutrient malnutrition also occur. For example, approximately 3% of Canadian women are underweight⁷ and 9% of women aged 20 to 49 years have low iron.⁸ Improving the quality of the food we eat (and how that food was produced, prepared, and shared) can have tremendous benefits for individual and population health.

DETERMINANTS OF HEALTHY EATING ARE COMPLEX

The determinants of eating behaviours are complex⁹ and there are several reasons why suboptimal diets – and their negative health effects – are increasingly common. In some cases, people lack understanding of healthy eating guidelines.¹⁰ More important is the impact of food and nutrition environments¹¹ and social determinants of health such as income, education, housing, and working conditions.¹² Food insecurity* affects 13% of Canadian households overall – and, of note for our community, it is more common among renters (26%) than those who own their homes (6.4%).¹³

Food insecurity is also evident among university students, including those at UBC¹⁴ where use of the AMS Food Bank has been increasing steadily since it opened in 2006.^{15, 16}

Did you know?

47% of young men aged 19–30 years in Canada drink sugar-sweetened soft drinks on any given day.¹⁷ The average amount consumed? About 650 mL (25 cups) – an amount that contains 72–84 g (18–21 teaspoons) of sugar. ¹⁷

Approximately 40% of Canadians aged 12 years and older eat vegetables or fruit at least five times per day.¹⁸

* According to the Provincial Health Services Authority, households are considered to be food insecure if they worry about or lack the financial means to buy healthy, safe, personally-acceptable food.



A bountiful harvest at the UBC Farm. Photo credit: Jamil Rhajiak / UBC Communications & Marketing

RESEARCH-INFORMED APPROACHES TO FOOD AND NUTRITION

SUSTAINABLE DIETS ARE HEALTHIER FOR PEOPLE AND BETTER FOR THE PLANET

Our food system plays a critical role in our changing climate. It is currently responsible for roughly a quarter of all greenhouse gas (GHG) emissions, the majority of which result from livestock production. The negative impacts of climate change are increasingly clear, yet actions to reduce climate change can have significant health benefits. For example, consuming a sustainable diet can both mitigate climate change and improve human health. Sustainable diets are nutritionally adequate, accessible, affordable, and culturally acceptable – and have low environmental impacts. All provides the consuming a sustainable diets are nutritionally adequate, accessible, affordable, and culturally acceptable – and have low environmental impacts.

Relatively small changes to dietary patterns (e.g., consuming more vegetables, fruit, and legumes and less meat and items with added sugars) can reduce GHG emissions from diet by more than a third.²⁴ These changes also benefit human health by reducing risk for chronic disease. In fact, research suggests that shifting to more sustainable diets could reduce global mortality by 6–10% while enabling important reductions in GHG emissions.²⁰

Supporting food and nutrition at UBC is critical – not only will it promote the health and wellbeing of students, staff, and faculty today, it will contribute to a sustainable future.

Did you know?

The United Nations has declared 2016–2025 to be the "Decade of Action on Nutrition" to promote access to healthy and sustainable diets for people worldwide.²⁵

The recent Lancet Commission on Health and Climate Change concluded: "tackling climate change could be the greatest global health opportunity of the 21st century." ²²



Enjoying the annual UBC Staff BBQ . Photo credit: Martin Dee / UBC Communications & Marketing

UNDERSTANDING FOOD AND NUTRITION WITHIN THE CURRENT UBC CONTEXT

UBC aims to be a nutritionally sound campus that supports the health and wellbeing of our students, faculty, staff and community members. The high cost of living in Vancouver has created food insecurity for some community members. The University recognizes that the food offered on its campuses plays a substantial role in supporting good nutrition—it is important that wholesome food be easily accessible and prioritized at UBC to keep our community members healthy and thriving, and to promote excellence in the classroom and the workplace.

UBC community members have long championed sustainable and equitable food systems through initiatives such as Fair Trade Campus status, Ocean Wise partnerships with the Vancouver Aquarium, the Tap Water Commitment to reduce consumption of bottled beverages, and the capture of used cooking oil to create biodiesel, among others. Many of these commitments are supported by a number of food providers on campus:

- UBC Food Services, one of the largest independent post-secondary food providers in Canada, operates 30 distinct brands, including five food trucks, six franchises, two full-service restaurants, three residence dining halls, concessions, catering, and a small grocery store.
- The student-run Alma Mater Society (AMS), operates seven brands, a number of franchises, a small grocery store, catering and the AMS Foodbank, which provides food relief to students in need.
- Three non-profit, student-run cafes.
- Independently-owned restaurants, grocery stores, and cafes in our campus neighbourhoods.

Did you know?

Behaviours adopted during late adolescence and early adulthood can influence health-related behaviour later in life.²⁶

The on-campus Food Bank, run by the Alma Mater Society, provides emergency food relief to students in need. Visits tripled from Fall 2014 to Fall 2015.



Weekly markets on campus and at the UBC Farm feature a variety of fresh fruits and veggies. Photo credit: Duncan McHugh / LFS Learning Centre

UNDERSTANDING FOOD AND NUTRITION WITHIN THE CURRENT UBC CONTEXT

The 24-hectare, organic-certified UBC Farm (one of the last working farms in Vancouver), is located on campus and is an integral part of the community, providing over 200 varieties of fresh fruit, vegetables, and herbs to many of the campus food outlets, hosting weekly on-campus farm markets, and offering community-supported agriculture boxes for purchase.

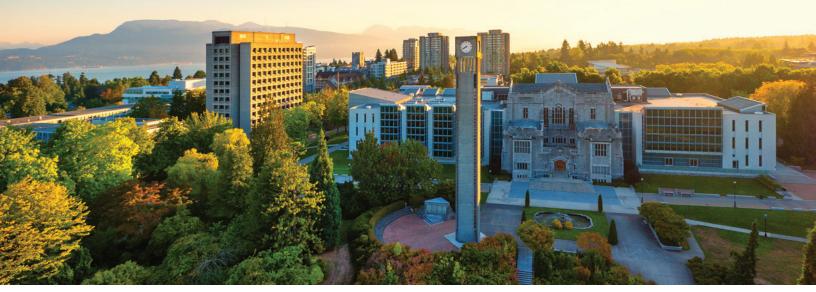
In addition to helping to feed the campus and neighbouring communities, the UBC Farm is also home to the Centre for Sustainable Food Systems, a research centre that acts as a living lab, providing unique opportunities to explore healthy, socially just, and sustainable food systems and to integrate interdisciplinary academic, community, and production programs. The Centre is part of the Faculty of Land and Food Systems, which includes the department of Food, Nutrition and Health, and the only dietetics program in the province.

A Food and Nutrition Working Group comprising members from a variety of campus faculties, departments and units, has been established on the Vancouver campus and is working collaboratively to increase awareness and facilitate action on how access to healthy food can contribute to building a healthier, happier, more sustainable and equitable community at UBC.

Did you know?

Over 60% of food products used at UBC are sourced locally, within 150 miles of campus.

At UBC, more than 100 tonnes of food waste is diverted from the landfill each year and composted to create nutrientrich soil that is used on campus.



Aerial view of UBC Vancouver Campus. Photo Credit: Hover Collective

APPROACH TO CREATING A NUTRITIONALLY SOUND CAMPUS

SHARED ASPIRATIONS: THE OKANAGAN CHARTER

UBC's strategy for promoting wellbeing through food and nutrition is informed by the *Okanagan Charter*; An International Charter for Health Promoting Universities and Colleges (2015).

The Charter outlines a shared aspiration for health promoting universities and colleges to transform the health and sustainability of our current and future societies, strengthen communities and contribute to the wellbeing of people, places and the planet.

Health and wellbeing promoting universities and colleges infuse health into everyday operations, business practices and academic mandates. By doing so, health promoting universities and colleges enhance the success of our institutions; create campus cultures of compassion, wellbeing, equity and social justice; improve the health of the people who live, learn, work and play on our campuses; and strengthen the ecological, social and economic sustainability of our communities and wider society.

OKANAGAN CHARTER CALLS TO ACTION

The Charter highlights two important Calls to Action, each with a number of underlying commitments, for higher education institutions:

- 1. Embed health into all aspects of campus culture, across the administration, operations and academic mandates.
- 2. Lead health promotion action and collaboration locally and globally.

Okanagan Charter Principles for Action

- 1. Use settings and whole system approaches
- 2. Ensure comprehensive and campuswide approaches
- Use participatory approaches and engage the voice of students and others
- 4. Develop trans-disciplinary collaborations and cross-sector partnerships
- 5. Promote research, innovation and evidence-informed action
- 6. Build on strengths
- 7. Value local and indigenous communities' contexts and priorities
- 8. Act on an existing universal responsibility

ACTION FRAMEWORK FOR IMPLEMENTING 'CALL TO ACTION 1' AT UBC

Call to Action 1 in the Okanagan Charter addresses on-campus efforts. Below are a selection of activities being taken by the UBC Vancouver campus for each of the commitments related to *Call to Action 1: Embed health into all aspects of campus culture, across the administration, operations and academic mandates.*

Okanagan Charter 'Call to Action 1'	Selection of UBC activities
1.1 Embed wellbeing in campus policies: review, create, and coordinate policies, practices and guidelines to support the flourishing of people, campuses, communities and our planet.	 Create a consensus vision and framework for action for a nutritionally sound campus. Review current campus policies that relate to healthy food and nutrition. Update the UBC 'Healthier Vending Machine Guidelines.'
1.2 Create supportive campus environments: identify and study opportunities on campus to inform change in built, natural, social, economic, cultural, academic, organizational, and learning environments.	 Provide enhanced support for the AMS Food Bank, including more awareness of their services to those community members experiencing food insecurity, as well as more resources and recovered food. Expand opportunities for students to participate in food and nutrition related research projects. Ensure that free, clean drinking water is easily accessible.
1.3 Generate a culture of wellbeing: by creating empowered, connected, and resilient campus communities that foster an ethic of care, compassion, collaboration, and community action.	 Create leading practices guidelines for outlets, events and meetings to inform decisions about food and nutrition in campus life. Align with food events to communicate and activate food and nutrition work (e.g. Welcome Back Staff BBQ, Harvest Feastival, UBC Farm Symposium). Create and share best practices and stories related to food and nutrition operations, initiatives, and research.
1.4 Support personal development: build student, staff and faculty resilience, competence, personal capacity and skills.	 Support learning to cook with healthy and nutritious food programming and space / community kitchens. Promote educational resources around food and nutrition (e.g. recipes, YouTube video series). Work with the community, vendors and food outlets to decrease sugar-sweetened beverage consumption through pricing strategies and nutrition messaging.
1.5 Create or re-orient campus services: to support equitable access, enhance health and wellbeing, optimize human and ecosystem potential, and promote a supportive organizational culture.	 Optimize pricing and merchandising strategies to make vegetables an easy and affordable option at food outlets, meetings, and events. Create an ingredient and allergen labelling procedure. Increase the amount of plant-based protein available on campus.



Feathered friends at the UBC Farm. Photo credit: Martin Dee / UBC Communications & Marketing

ACHIEVEMENTS TO DATE

- **UBC Food and Nutrition Working Group**. A group of student, faculty, staff and campus community representatives has been formed on the Vancouver campus and meets monthly to guide food and nutrition strategies for the University.
- Healthy Workplace Initiatives funding. Since 2009, the Healthy
 Workplace Initiatives Program has distributed funds to support unit-led
 start-up and maintenance of departmental patio gardens and edible
 plant programs.
- Increased staff support for food and nutrition initatives. In 2015, two campus dietitian positions (in Student Housing & Hospitality Services and Athletics & Recreation) were created to provide nutrition counselling and education to students, as well as guidance on healthy menu offerings.
- **SEEDS Sustainability Program.** During the 2015-2016 academic year, approximately 90 students in nine different undergraduate and graduate classes completed a total of 20 food-related projects through the SEEDS Sustainability Program. Projects included: an assessment of campus hunger and its impacts, a review of signage practices in the AMS Nest, and an assessment of barriers to healthy eating in first year residences.
- **Nutrition workshops.** Over 800 community members attended 2015-2016 nutrition-related workshops for staff and faculty on topics including *Debunking your Diet, Diet and Stress, Food Allergies and Intolerances, Food Labels, Healthy Eating for the Holidays* and more.
- Increased awareness of the AMS Food Bank. During the 2015-2016 school year, the student-run AMS Food Bank received 1,150 total client visits. Through various initiatives to raise awareness about this campus service, more students are now able to access emergency food relief services at the Food Bank up to six times per semester.



Stopping for a selfie at the annual UBC Staff BBQ Photo credit: Justin Lee

ACHIEVEMENTS TO DATE

- **Staff BBQ menu changes.** UBC Food Services is working with UBC Human Resources to make meaningful changes to improve the nutrional value of meals served during the Welcome Back Staff BBQ.
- Access to fresh produce at the AMS Food Bank. This year student
 volunteers worked hard to develop process and system upgrades that
 now allow the AMS Food Bank to accept fresh produce donations,
 providing their clients with access to healthier, more nutritious foods
 options.
- **UBC Farm certified organic.** All produce is grown according to British Columbia Certified Organic Management Standards, and, as of May 1st, 2016, UBC Farm is now certified organic through the North Okanagan Organic Association. Soil stewardship is maintained through cover cropping and the use of compost, weeds are managed through hand or mechanical cultivation, and the farm aims to maintain a healthy balance of beneficial insects to keep pest populations in check.
- **Farm markets.** UBC Farm hosts weekly markets on the campus core each Wednesday from June to October in addition to weekly Tuesday and Saturday markets at the farm, providing community members with increased opportunity to access fresh, organic produce.
- New residence dining options. In September 2016, UBC Food Services launched Open Kitchen, a new residence-dining hall that features UBC Food Services' first dedicated kitchen to provide strictly vegetarian and vegan plant-based meals accessible to the entire campus community.



 $Students\ test\ out\ their\ cooking\ skills\ in\ the\ culinary\ lab.\ Photo\ credit:\ Don\ Erhardt\ /\ UBC\ Communications\ \&\ Marketing\ Angles \ Angles$

WORKING GROUP MEMBERS

The Food and Nutrition Working Group is composed of representatives from across the Vancouver campus working together towards our goal of creating a nutritionally sound campus.

- UBC Food Services
- Alma Mater Society
- Student Housing and Hospitality Services
- Campus + Community Planning (SEEDS Program)
- Faculty of Land and Food Systems
- Student Health Services
- Centre for Sustainable Food Systems at UBC Farm
- UBC Human Resources
- UBC Wellbeing



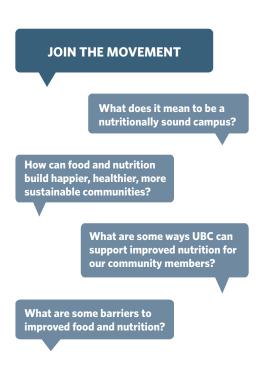
Inspiration for the UBC Slaw signature recipe. Photo credit: Duncan McHugh / LFS Learning Centre

REFERENCES

- 1. World Health Organization, 2005. Bangkok Charter for Health Promotion in a Globalized World. Geneva.
- 2. International Food Policy Research Institute, 2015. Global Nutrition Report 2015: Actions and accountability to Advance Nutrition and Sustainable Development. Washington, D.C.
- Forouzanfar, M.H., Alexander, L., Anderson, H.R., Bachman, V.F., Biryukov, S., Brauer, M., Burnett, R., Casey, D., Coates, M.M., Cohen, A. and Delwiche, K., 2015. Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks in 188 countries, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. The Lancet, 386, pp.2287-2323.
- 4. Wang, X., Lin, X., Ouyang, Y.Y., Liu, J., Zhao, G., Pan, A. and Hu, F.B., 2016. Red and processed meat consumption and mortality: dose-response meta-analysis of prospective cohort studies. *Public health nutrition*, 19(05), pp.893-905.
- World Cancer Research Fund / American Institute for Cancer Research, 2007. Food, Nutrition, Physical Activity, and the Prevention of Cancer: A Global Perspective. Washington, DC.
- 6. World Health Organization, 2015. Guideline: sugars intake for adults and children. Geneva. http://www.statcan.gc.ca/pub/82-625-x/2014001/article/14104-eng.htm
- 7. Statistics Canada, 2015. Body Composition of adults, 2012 to 2013. Ottawa.
- 8. Cooper, M., Greene-Finestone, L., Lowell, H., Levesque, J. and Robinson, S., 2012. Iron sufficiency of Canadians. Health Reports, 23(4), pp.41-48.
- 9. Raine K.D., 2005. Determinants of healthy eating in Canada: An overview and synthesis. Canadian Journal of Public Health, 96(S3), pp.S8-S14.
- 10. Matthews, J.I., Doerr, L., Dworatzek, P.D., 2016. University students intend to eat better but lack coping self-efficacy and knowledge of dietary recommendations. *Journal of nutrition education and behavior*, 48(1), pp.12-19.
- 11. Glanz, K., Sallis, J.F., Saelens, B.E. and Franl, L.D., 2005. Healthy nutrition environments: Concepts and measures. *American Journal of Health Promotion*. 19(5), pp.330-333.
- 12. Mikkonen, J. and Raphael, D., 2010. Social Determinants of Health: The Canadian Facts. York University School of Health Policy and Management. Toronto.
- 13. Tarasuk, V., Mitchell, A. and Dachner, N., 2014. Household food insecurity in Canada, 2012. Research to identify policy options to reduce food insecurity (Proof). Toronto. Retrieved from http://nutritionalsciences.lamp.utoronto.ca
- 14. James, C.E. and Rideout, C.A. Food insecurity among university students: who is at risk? Manuscript in preparation.
- 15. Cassandra, L., Helen, G., Katelyn, L. and Wenbo, L., 2016. Student Hunger at UBC Point Grey Campus. UBC SEEDS Program Report. Vancouver.
- 16. Robinson, M. B.C. post-secondary students increasingly relying on food banks. Vancouver Sun. July 17, 2015.
- 17. Garriguet, D., 2008. Beverage consumption of Canadian adults. Health Reports. 19(4), pp.23-29.
- 18. Centre for Chronic Disease Prevention, Public Health Agency of Canada, 2015. Chronic Disease and Injury Indicator Framework: Quick Stats, 2015 Edition. Ottawa.
- 19. Vermeulen, S.J., Campbell, B.M. and Ingram, J.S., 2012. Climate change and food systems. Annual Review of Environment and Resources, 37(1), pp.195-222.
- 20. Springmann, M., Godfray, H.C.J., Rayner, M. and Scarborough, P., 2016. Analysis and valuation of the health and climate change cobenefits of dietary change. *Proceedings of the National Academy of Sciences*. 113(15), pp.4146-4151.
- 21. Gerber, P.J., Steinfeld, H., Henderson, B., Mottet, A., Opio, C., Dijkman, J., Falcucci, A. and Tempio, G., 2013. *Tackling climate change through livestock: A global assessment of emissions and mitigation opportunities*. Food and Agriculture Organization of the United Nations (FAO).
- 22. Watts, N., Adger, W.N., Agnolucci, P., Blackstock, J., Byass, P., Cai, W., Chaytor, S., Colbourn, T., Collins, M., Cooper, A. and Cox, P.M., 2015. Health and climate change: Policy responses to protect public health. *The Lancet*, 386, pp.1861-1914.
- 23. Burlingame, B., Dernini, S. (eds), 2012. Sustainable diets and biodiversity: Directions and solutions for policy, research and action. Food and Agriculture Organization of the United Nations (FAO).
- 24. Macdiarmid, J.I., Kyle, J., Horgan, G.W., Loe, J., Fyfe, C., Johnstone, A. and McNeill, G., 2012. Sustainable diets for the future: Can we contribute to reducing greenhouse gas emissions by eating a healthy diet? *American Journal of Clinical Nutrition*. 96(3), pp.632-639.
- 25. World Health Organization. General Assembly proclaims the Decade of Action on Nutrition. Published April, 2016. Available at: http://www.who.int/nutrition/GA_decade_action/en/
- 26. Nelson, M.C., Story, M., Larson, N.I., Neumark-Sztainer, D. and Lytle, L.A., 2008. Emerging adulthood and college-aged youth: An overlooked age for weight-related behaviour change. Obesity. 16(10). pp.2205-2211.

This framework is intended as a living document to be updated and revised on a continual basis. We welcome you to explore ways to make it reflective of the needs of our community as we work together towards realizing the vision of a nutritionally sound campus.

Version: January, 2017



wellbeing.ubc.ca