



GUIDE TO
SUSTAINABLE
MENUS



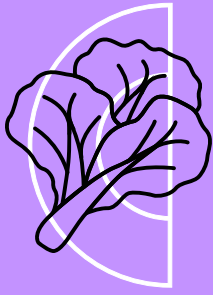
A guide to sustainable menus

A step by step approach
to sustainability



NOURISH
The future of food
in health care.

November 2019



Chapter 6

Choosing your sustainable vegetables



Sustainable vegetables

Why eat vegetables?

Vegetables are part of the most strongly recommended type of food in the new Canada's Food Guide, which recommends that along with fruit, they should comprise half of your diet. Vegetables are rich in vitamins, minerals, and fibre¹⁰¹ and consumption can reduce the risk of some types of cancer and lower your risk for heart disease.¹⁰² They also add a variety of colours, textures, and tastes to your plate!

Why are sustainable vegetables important?

For food service managers who make dietary choices, moving towards a plant-based diet is the most effective way to reduce greenhouse gas emissions.¹⁰³ When assessing the life cycle of fruits and vegetables, transportation accounts for the highest proportion of greenhouse gas emissions.¹⁰⁴ Local foods, which reduce transportation distances, are also fresh, have great variety, save money, and support local farmers.¹⁰⁵ Local fruit and vegetables can also be frozen to maintain highest content of nutrients and be available all year long to reduce imports.

What is the impact of sustainable vegetables on health?

Regional, in-season foods have the potential to possess higher nutritional quality. For example, imported out-of-season broccoli was found to contain half the vitamin C of regional broccoli grown in season.¹⁰⁶

See the appendix regarding pesticide use in vegetables.

101 Dietitians of Canada, 2018.

102 Health Canada, 2008.

103 Poore & Nemecek, 2018.

104 Weber & Matthews, 2008.

105 Dietitians of Canada, 2017.

106 Wunderlich et al., 2008.

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What are my vegetable standards?

Before choosing the type of vegetable for a menu, standards must be written. Vegetable standards are guidelines that you must work with such as dietary restrictions, allergies, and patient preferences.

Below is an example of vegetable standards written by a food service manager for their institution. The last two columns indicate a clientele to which they may apply (examples might be the elderly, youth, acute care patients, etc.).

Criteria	Clientele a	Clientele b
5 varieties of vegetable and fruit per day	X	X
Choice of 2 hot vegetables for each meal, including low residue and soft texture	X	X
Vegetable salad available as a side dish	On demand	On demand
Cook vegetables with steam instead of boiling them	X	X
Limit repetition to 2 days	X	X

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Making sustainable vegetable choices

What do I need to change?

The needs of healthcare users may vary and vegetables are not always the priority on the plate. It is important to respond well to the needs of the user (diets, preference) to limit waste. The freshness and quality of the products offered often make the difference between a vegetable consumed and a vegetable discarded.

The EAT-Lancet Commission recommends that North Americans should consume 300 g of vegetables per day, a significant increase from the current average consumption.

How can I change?

VEGETABLE GARDEN

Consider starting your facility's own vegetable garden! The advantages are plentiful: fresh, healthy, sustainable vegetables that cost less and are free of pesticides. A garden can also serve as a therapeutic centre for patients, encouraging physical, nutritional, and mental health benefits.¹⁰⁷ Consult this blog to learn more about garden: Louise Quenneville, Nourish Innovator at Hôpital Glengarry Memorial Hospital.



Seasonal vegetable table

The table below is a national guide to seasonal vegetables in Canada. Consult the appendix for province-appropriate and imported references.

Vegetable colour ▶	Green	Orange	Yellow	White	Other colours	Tips for choosing	Tips for inclusion
Vegetable season ▼							
Spring	Asparagus Spinach Brussel sprouts Cabbage Fiddleheads	Carrots	Artichoke	Rutabaga Potatoes	Radishes Rhubarb Peppers	<ul style="list-style-type: none"> • Choose organic. <ul style="list-style-type: none"> · Organic farming keeps soil healthy by not using synthetic fertilizers and pesticides, preventing erosion, and enhancing nutrient and water absorption capabilities.¹⁰⁸ <p>See the appendix for information on pesticide and fertilizer use.</p>	<ul style="list-style-type: none"> • Consider freezing local produce when it's in season. <ul style="list-style-type: none"> · Long-term storage of local produce (freezing) may be a better alternative than imported produce.¹¹⁰
Summer	Broccoli Celery Cucumber Lettuce Leeks Green onions Peas Snow peas Kale Artichoke Cabbage Spinach Beans Swiss chard Leeks	Carrots	Zucchini Sweet corn Beans	Cauliflower Garlic Parsnips Potatoes	Peppers (field) Beets Tomatoes (field) Red onions	<ul style="list-style-type: none"> • Choose regional. <ul style="list-style-type: none"> · Prioritize Canadian; however, if you are based in Quebec, for example, it is better to source from Vermont or Maine than Alberta. 	<ul style="list-style-type: none"> • If a vegetable is out of season, consider the imported variety rather than the local, greenhouse-grown kind. <ul style="list-style-type: none"> · Increased storage and technology to produce vegetables out of season could have a higher environmental impact than imported produce.
Fall	Broccoli Brussels sprouts Cabbage Celery Leeks Artichoke Kale	Pumpkin Carrots Squash	Zucchini	Parsnips Cauliflower Garlic Turnips Potatoes	Eggplants Beets Peppers Red onions, sweet onions	<ul style="list-style-type: none"> • Choose fresh, field-grown. <ul style="list-style-type: none"> · Cultivation in greenhouses, especially those heated with fossil fuels, emit more greenhouse gases than cultivation on open land.¹⁰⁹ 	
Winter	Leeks Kale Brussels sprouts Okra	Sweet potatoes Squash		Turnips Rutabaga	Red onions Beets Parsnips	<ul style="list-style-type: none"> · If unavailable, choose frozen or canned options if out of season. Canned options may contain more sodium. <p>See the appendix for canned produce.</p>	

108

FAO, 2018.

109

Blomgren, 2013.

110

Canals, Munoz, Hospido, Plassman, McLaren, 2008.

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Controlling vegetable waste

Prevent the waste

- **Eat the leafy tops of vegetables.**
 - Root vegetables such as beets and carrots have nutritious, flavourful green tops that can be added to salads or sautéed with other greens.
- **Retain vegetable peels and trimmings.**
 - Onion skins and carrot tops can be kept and boiled to make a soup broth. Freeze peels and trimmings until you have enough to prepare at a later time.

See sustainable soup for more details.

Repurpose the waste

- **Make compost!**
 - This would be appropriate for your vegetable garden. See Practice Greenhealth's frequently asked questions about compost.
- **Make vegetable stock from scraps.**
 - Onion, zucchini, mushrooms: collect the ends of these vegetables, boil and create a vegetable stock.

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Learning about traditional Indigenous vegetable sources

The examples that follow may represent foods of a specific geographical location or Indigenous territory. Please be mindful of the Indigenous territory you are on: make connections, build relationships and learn what foods are original to this territory.

Indigenous peoples have used plants for thousands of years for numerous purposes including food, medicine, and ceremonies. Plants are always harvested consciously and mindfully, according to the seasons¹¹¹. Consumption of plants provided vitamins and minerals unavailable in game meats and gave a wide variety of

111 First Nations Health Authority, 2014.

flavour and texture to dishes.¹¹² These specific plants can be found by searching for “ancestral seeds” online.

The following information is derived from *Traditional Plant Foods of Canadian Indigenous Peoples*, Kuhnlein and Turner, 1991.

ROOT VEGETABLES

See Chapter 5.

GREEN VEGETABLES

Green vegetables include stems, leaves, shoots and buds. Examples of stem and shoot vegetables include thimbleberry and salmon-berry, fireweed, cow-parsnip, Indian celery, and fiddleheads. Leaf vegetables are plants such as lambsquarters, watercress, mustard greens and nettles. Green vegetables can be expected to have a high moisture content, carotene and other vitamins (vitamin C and folic acid) and minerals such as iron, calcium, and magnesium.¹¹³

MUSHROOMS AND FUNGI

A relatively small number of mushroom and fungi species featured in traditional Indigenous diets, some of them still being used. Few studies have been done on the nutrient contents of wild mushrooms, but indications are that their nutrient content is comparable to that of commercially available types.¹¹⁴

LICHENS, SEAWEED, AND ALGAE

See also chapter 4 on proteins.

Lichens, especially rock tripe and black tree lichen, were used in some areas, both as food and emergency food. In the far North, lichens were also utilized in a partially digested state from the rumens of caribou. Marine algae, or seaweeds, were used by virtually all coastal peoples, and sometimes were traded inland. Still used at present, they are important sources of vitamins and several minerals, particularly iodine. Both algae and lichens can be difficult to digest unless specially processed. There is little documentation on their nutrient contribution to the diets of Indigenous Peoples. Algae have also been used as an emergency food (energy source) in coastal areas where fish and game were for some reason limited.

112 Kuhnlein & Turner, 1991.
113 Ibid
114 Turner et al., 1987.

FLOWERS

Flowers are unusual plant foods which are not usually available on a commercial basis today. Indigenous Peoples took advantage of such delicacies as rose petals, fireweed flowers, and mariposa lily buds. Flowers are high moisture-containing foods, usually low in protein and fat, but some can be surprisingly rich in vitamin A (as carotene) or vitamin C. There is extremely little published information on the mineral content of flowers.

Appendix

Regional produce

Consult the following websites for provincial produce guides:

Province	Site
British Columbia	We Heart Local B.C local
Alberta	Alberta local food week
Saskatchewan	Saskatchewan Vegetable Growers' Association
Manitoba	Manitoba Agriculture: Manitoba local produce guide
Ontario	Foodland Ontario: Availability guide
Québec	Équiterre: produits de saison
New Brunswick	The Spruce Eats: New Brunswick seasonal fruits and vegetables
Newfoundland and Labrador	Newfoundland and Labrador Farm Guide
Nova Scotia	Select Nova Scotia: Seasonal Availability
Prince Edward Island	Canada's Food Island: What's in Season

While it is difficult to learn about and influence the working conditions under which most purchased food is produced, buying produce directly from regional producers can provide greater access to this information: even in Canada, migrant workers can have limited access to labour rights. See the 2015 report [Status of Migrant Farm Workers in Canada](#), (published by United Food and Commercial Workers Canada and the Agriculture Workers Alliance) as well as [Farm Workers in Western Canada: Injustices and Activism](#) (published by the University of Alberta Press).

Fresh vs canned vs frozen produce

In terms of nutritional content, fresh produce is only superior if consumed immediately post-harvest. Otherwise, the nutritional value of fresh, canned or frozen produce is relatively similar (although canned vegetables may be high in sodium).¹¹⁵

There are few studies comparing the environmental impact of frozen and of canned produce. Most are completed by steel-affiliated industries, which conclude that canned food uses less energy than frozen food. The energy used to store frozen food represents the main environmental impact of frozen produce, while the energy used to manufacture steel cans represents the main the environmental impact of canned food.¹¹⁶

However, transportation can play a large role in the environmental impact of frozen and canned produce. While how far away the food is produced plays a role in food's environmental impact, the mode of transportation can be even more important. Air transportation produces the greatest volume of carbon emissions: increased use of ship and rail transportation is desirable, as well as maximizing truckloads in road transportation.¹¹⁷ While it can be difficult to quantify transportation-related emissions of various options, in some cases it is clear (for example, fresh beans from California would have more transportation-related emissions than canned ones from Ontario).

115

Brown, 2017.

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Institute for Environmental Research and Education, 2007.

117

Wakeland et al., 2012.

Genetically modified organisms (GMOs), genetic engineering (GE), genetically modified (GM)

Crops have been genetically modified for thousands of years. Through plant breeding and artificial selection, we have been able to domesticate plants into the fruits and vegetables we consume today.¹¹⁸ Genetic engineering is a new technology for genetically modifying crops. Before a genetically engineered crop is approved for growth and sale in Canada it must undergo a rigorous assessment by Health Canada to ensure it is safe for human consumption.¹¹⁹ Genetic engineering is used in several different forms of pesticides (a term that includes herbicides, insecticides and fungicides).¹²⁰ GM crops are commonly genetically engineered to resist herbicides that may be used to control weeds. However, the use of these crops prompts the proliferation of herbicide-resistant weeds, increasing farmers' reliance on chemical herbicides and allowing herbicide-resistant weeds to proliferate.¹²¹ The chief concerns with GM crops arise from the uncertainty related to the long-term health effects of both consumption and the associated increased use of herbicides and pesticides. Dietitians of Canada and Health Canada state that there are no such effects^{122 123}. However, Health Care Without Harm encourages healthcare facilities to refrain from purchasing genetically engineered foods due to evidence of risks worldwide.¹²⁴ In Canada, four GM crops are currently grown: corn, soybean, canola, and sugar beet.¹²⁵

Imported produce

In 2017, the top vegetables (including field and greenhouse) imported into Canada were tomatoes, lettuce, peppers and cabbages. The top imports from the United States were lettuce, cabbage and broccoli/cauliflower, whereas imports from Mexico consisted primarily of tomatoes, peppers and cucumbers/gherkins.¹²⁶

It is important to be aware of your supplier's source for produce. In 2014, the Los Angeles Times published an 18 month [investigative report](#) exposing inhumane labour conditions, including child labour

118 Gepts, 2001.
 119 Health Canada, 2012.
 120 Canadian Biotechnology Action Network (cban.ca)
 121 Gilbert, 2013.
 122 Dietitians of Canada, n.d.
 123 Health Canada, 2018.
 124 Healthcare Without Harm, n.d.
 125 Dietitians of Canada, n.d.
 126 Agriculture and Agri-Food Canada, 2017.

at produce farms in Mexico for export to the United States¹²⁷ – and it would be safe to assume that there are similar issues with exports to Canada.

Pesticides, fertilizers

THE ENVIRONMENTAL PERSPECTIVE

Pesticides can pose risks to all ecosystems: terrestrial, aerial, and most significantly, aquatic and marine. From 1981 to 2011, Agriculture and Agri-Food Canada assessed the risk of water contamination by pesticides across Canada. Within this period of time, they found the risk had risen by up to 50% due to an increase in the area treated by pesticides and by unusual wet weather.¹²⁸ In a review published in *Science*, researchers additionally argued that studies on pesticides in the environment fail to account for the diversity in environmental conditions and the transformations of those pesticides in the environment, particularly by microorganisms, which are not replicable in laboratory settings.¹²⁹

Fertilizers—which are primarily composed of the elements nitrogen, phosphorus and potassium—can also affect water quality. From 1981 to 2011, Agriculture and Agri-Food Canada found that the risk of nitrogen loss through leaching into ground and surface water had increased by up to 36%. This can lead to algal blooms, acidification, and increase in greenhouse gas emissions.¹³⁰ Within the same period of time, the risk of phosphorus contamination increased by up to 50%, contributing to eutrophication and algal blooms.¹³¹

THE HUMAN HEALTH PERSPECTIVE

Health Canada sets a maximum residue level for pesticides on food well below the residue level that could pose a health concern.¹³² The annual publication of *Environmental Working Group's "Dirty Dozen"* highlights the top 12 fruits and vegetables which contain the highest amounts of pesticide residue: however, it is important to recognize the context of this report with regard to human consumption. Pesticide residue (product of food consumption and residue level) is not equivalent to the direct pesticide exposure that occurs during production. A study in the *Journal of Toxicology* estimated average pesticide exposure from consuming the 12 fruits

127 Morosi & Bartletti, 2014.
 128 Agriculture and Agri-Food Canada, 2011.
 129 Fenner et al., 2013.
 130 Agriculture and Agri-Food Canada, 2011.
 131 Agriculture and Agri-Food Canada, 2011.
 132 Health Canada, 2015.

and vegetables using a database of 2000 people.¹³³ This estimate was then compared to the reference dose, which is an estimate of the amount of a chemical that a person could be exposed to on a daily basis throughout the person's lifetime that is likely to carry no appreciable risk of harm.¹³⁴ The study found that in 90% of the comparisons, the average pesticide exposure was 1000 times less than the reference dose.

Although pesticide exposure may be low, there are also indirect and chronic human health impacts. There is much uncertainty regarding the synergistic effects of exposure to multiple pesticides, particularly in low doses over a long period of time. This is of particular interest to those who may live near agricultural operations, or who work directly with pesticides. A study published in *Frontiers in Public Health* found the following:

“The combination of substances with probably carcinogenic or endocrine-disrupting effects may produce unknown adverse health effects. Therefore, the determination of “safe” levels of exposure to single pesticides may underestimate the real health effects, ignoring also the chronic exposure to multiple chemical substances.”¹³⁵

When working towards a sustainable diet that supports reduced synthetic chemical use overall, choose organic whenever possible.

References

Agriculture and Agri-Food Canada. (2017, August 23). Statistical Overview of the Canadian Vegetable Industry - 2016. Retrieved from <http://www.agr.gc.ca/eng/industry-markets-and-trade/canadian-agri-food-sector-intelligence/horticulture/horticulture-sector-reports/statistical-overview-of-the-canadian-vegetable-industry-2016/?id=1501890793620>

Agriculture and Agri-Food Canada. (2011). Pesticides Indicators. Retrieved from <http://www.agr.gc.ca/eng/science-and-innovation/agricultural-practices/water/pesticides-indicator/?id=1462401144426>

Agriculture and Agri-Food Canada. (2011). Nitrogen Indicators. Retrieved from <http://www.agr.gc.ca/eng/science-and-innovation/agricultural-practices/water/nitrogen-indicator/?id=1461713461325>

133 Winter & Katz, 2011.
134 Winter & Francis, 1997.
135 Nicolopoulou-Stamati et al., 2016.

Agriculture and Agri-Food Canada. (2011). Phosphorus Indicators. Retrieved from <http://www.agr.gc.ca/eng/science-and-innovation/agricultural-practices/water/phosphorus-indicator/?id=1462404259528>

Benefits of therapeutic hospital gardens compiled by Carleton students | CBC News. (2016, April 19). Retrieved from <https://www.cbc.ca/news/canada/ottawa/hospital-garden-study-carleton-1.3541892>

Blomgren, M. (2013). The connection between the issue of food waste and its collection for biogas: A case study of the municipality of Stockholm. Retrieved from <https://www.diva-portal.org/smash/get/diva2:625400/FULLTEXT01.pdf>

Brown, M. (2017, June 15). Fresh vs Frozen Fruit and Vegetables - Which Are Healthier? Retrieved from <https://www.healthline.com/nutrition/fresh-vs-frozen-fruit-and-vegetables#section6>

Calvin, L. & Martin, P. (2010, November). The U.S. Produce Industry and Labor: Facing the Future in a Global Economy. Retrieved from https://ageconsearch.umn.edu/record/262245/files/8069_err106.pdf

Canals, L. M., Munoz, I., Hospido, A., Plassmann, K., McLaren, S. (2008). Life Cycle Assessment (LCA) of Domestic vs. Imported Vegetables. Case studies on broccoli, salad crops and green beans. Surrey: Centre for Environmental Strategy, University of Surrey.

Dale, P. J., Clarke, B., & Fontes, E. M. (2002). Potential for the environmental impact of transgenic crops. *Nature Biotechnology*, 20(6), 567-574. doi:10.1038/nbt0602-567

Dietitians of Canada. (2017). Benefits of Buying Local Food. Retrieved from <http://www.unlockfood.ca/en/Articles/Food-Production/Benefits-of-Buying-Local-Food.aspx>

Dietitians of Canada. (n.d.). Understanding Genetically Modified Foods. Retrieved from <http://www.unlockfood.ca/en/Articles/Food-technology/Understanding-Genetically-Modified-Foods.aspx>

Dietitians of Canada. (2018, May 1). How Many Vegetables and Fruit Do you Need? Retrieved from <http://www.unlockfood.ca/en/Articles/Canada-s-Food-Guide/How-Many-Vegetables-and-Fruit-Do-you-Need.aspx>

Fenner, K., Canonica, S., Wackett, L. P., & Elsner, M. (2013). Evaluating pesticide degradation in the environment: blind spots and emerging opportunities. *science*, 341(6147), 752-758.

First Nations Health Authority. (2014). Traditional Foods Fact Sheet. Retrieved from http://www.fnha.ca/wellnessContent/Wellness/Traditional_Food_Facts_Sheets.pdf

Food and Agriculture Organization. (2014). Organic Agriculture. Retrieved from <http://www.fao.org/organicag/oa-home/en/>

Gepts, P. 2001. Origins of plant agriculture and major crop plants. p. 629–637. In M. Tolba (ed.) *Our fragile world: Challenges and opportunities for sustainable development*. EOLSS Publishers, Oxford, UK.

Gilbert, H. (2013). A Hard Look at GM Crops. *Nature*, 497, 24-26. Retrieved from https://www.nature.com/polopoly_fs/1.12907!/menu/main/topColumns/topLeftColumn/pdf/497024a.pdf?origin=ppub

Health Canada. (2008, January 14). Vegetables and Fruit. Retrieved from <https://www.canada.ca/en/health-canada/services/food-nutrition/canada-food-guide/choosing-foods/vegetables-fruit.html>

Health Canada. (2012, December 12). The Regulation of Genetically Modified Food. Retrieved from <https://www.canada.ca/en/health-canada/services/science-research/reports-publications/biotechnology/regulation-genetically-modified-foods.html>

Health Canada. (2018, February 27). Frequently Asked Questions - Biotechnology and Genetically Modified Foods. Retrieved from <https://www.canada.ca/en/health-canada/services/food-nutrition/genetically-modified-foods-other-novel-foods/factsheets-frequently-asked-questions/part-1-regulation-novel-foods.html#b8>

Health Canada. (2019, January 16). Pesticides and food safety. Retrieved from <https://www.canada.ca/en/health-canada/services/about-pesticides/pesticides-food-safety.html>

Health Canada. (2015, February 17). Maximum Residue Limits for Pesticides. Retrieved from <https://www.canada.ca/en/health-canada/services/consumer-product-safety/pesticides-pest-management/public/protecting-your-health-environment/pesticides-food/maximum-residue-limits-pesticides.html>

Healthcare Without Harm, n.d. Position Statement on Genetically Modified Foods. Retrieved from https://noharm.org/sites/default/files/lib/downloads/food/Genetic_Engineered_Food_Stmnt.pdf

Institute for Environmental Research and Education. (2007). Canning Green Beans, Ecoprofile of Truitt Brothers Process. Retrieved from: http://nbis.org/nbisresources/life_cycle_assessment_thinking/casestudy_canned_frozen_beans_ecoprofile_iere.pdf

Kuhnlein, H. V., & Turner, N. J. (1991). *Traditional plant foods of Canadian Indigenous peoples: Nutrition, botany, and use*. New York: Gordon and Breach.

Morosi, R. & Bartletti, D. (2014, December 7). Product of Mexico: Hardship on Mexico's farms, a bounty for U.S. tables. Retrieved from <http://graphics.latimes.com/product-of-mexico-camps/>

Nicolopoulou-Stamati, P., Maipas, S., Kotampasi, C., Stamatis, P., & Hens, L. (2016). Chemical pesticides and human health: the urgent need for a new concept in agriculture. *Frontiers in public health*, 4, 148.

Network for Business Innovation and Sustainability; Institute for Environmental Research and Education. (2007). *Canning Green Beans Ecoprofile of Truitt Brothers Process*. Schenck, R.

Poore, J., & Nemecek, T. (2018). Reducing food's environmental impacts through producers and consumers. *Science*, 360(6392), 987-992. doi:10.1126/science.aag0216

Quenneville, L. (2017, October 11). HGMH's therapeutic garden has become a model space for natural healing. Retrieved from <https://www.nourishhealthcare.ca/blog/2017/10/10/hgmh-therapeutic-garden-has-become-a-model-space-for-natural-healing>

Thompson, P., Newsome, K., & Commander, J. (2012). 'Good when they want to be': Migrant workers in the supermarket supply chain. *Human Resource Management Journal*, 23(2), 129-143. doi:10.1111/j.1748-8583.2011.00186.x

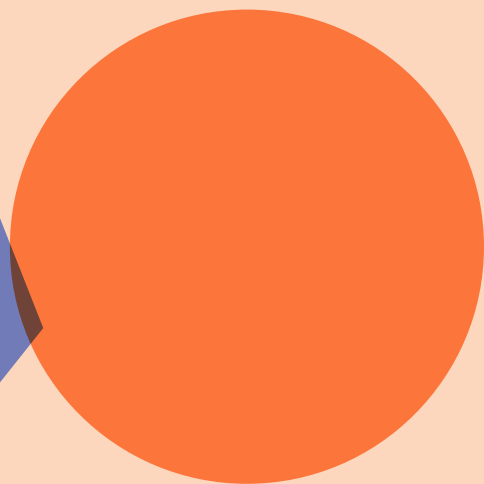
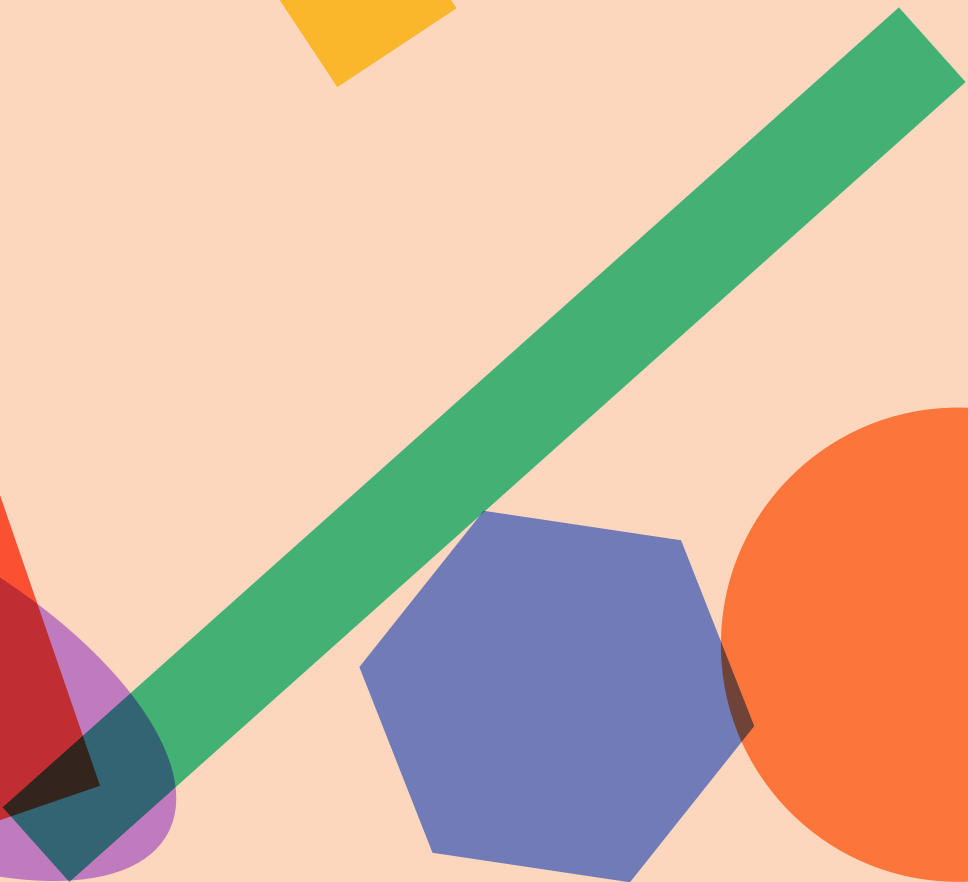
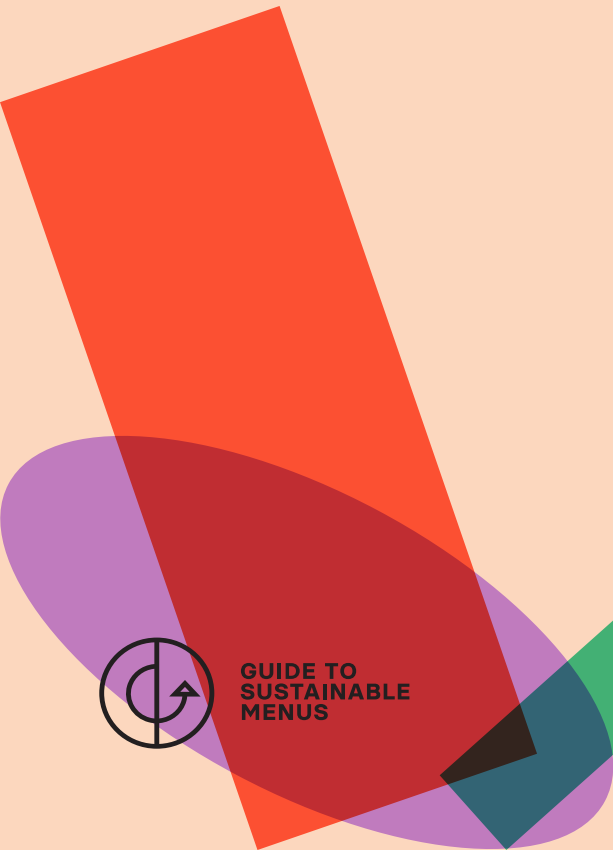
Wakeland, W., Cholette, S., & Venkat, K. (2012). Food transportation issues and reducing carbon footprint. In *Green technologies in food production and processing* (pp. 211-236). Springer, Boston, MA.

Winter, C. K. & Francis, F. J. (1997). Assessing, managing, and communicating chemical food risks. *Food Technology*, 51(5), 85-92. Retrieved from http://www.ift.org/~media/Knowledge%20Center/Science%20Reports/Scientific%20Status%20Summaries/assessingfoodrisk_0597.pdf

Winter, C. K., & Katz, J. M. (2011). Dietary Exposure to Pesticide Residues from Commodities Alleged to Contain the Highest Contamination Levels. *Journal of Toxicology*, 2011, 1-7. doi:10.1155/2011/589674

Weber, C. L., & Matthews, H. S. (2008). Food-Miles and the Relative Climate Impacts of Food Choices in the United States. *Environ. Sci. Technol.*, 42 (10), 3508-3513. doi: 10.1021/es702969f

Wunderlich, S. M., Feldman, C., Kane, S., & Hazhin, T. (2008). Nutritional quality of organic, conventional, and seasonally grown broccoli using vitamin C as a marker. *International Journal of Food Sciences and Nutrition*, 59(1), 34-45. doi:10.1080/09637480701453637



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