Summary of Results
Delphi Round 3, April 2017

Research collaboration with:

Dietitians of Canada
Les diététistes du Canada

BLEKINGE
INSTITUTE OF
TECHNOLOGY

Dear reader and participant,

A heartfelt THANK YOU for everything you have done so far. We hope you will read this final summary with interest, and with an eye for how to stay engaged, whether or not you can participate in the workshop June 7th.

Sincerely,

The research team!

Liesel, Edith, & Jesper



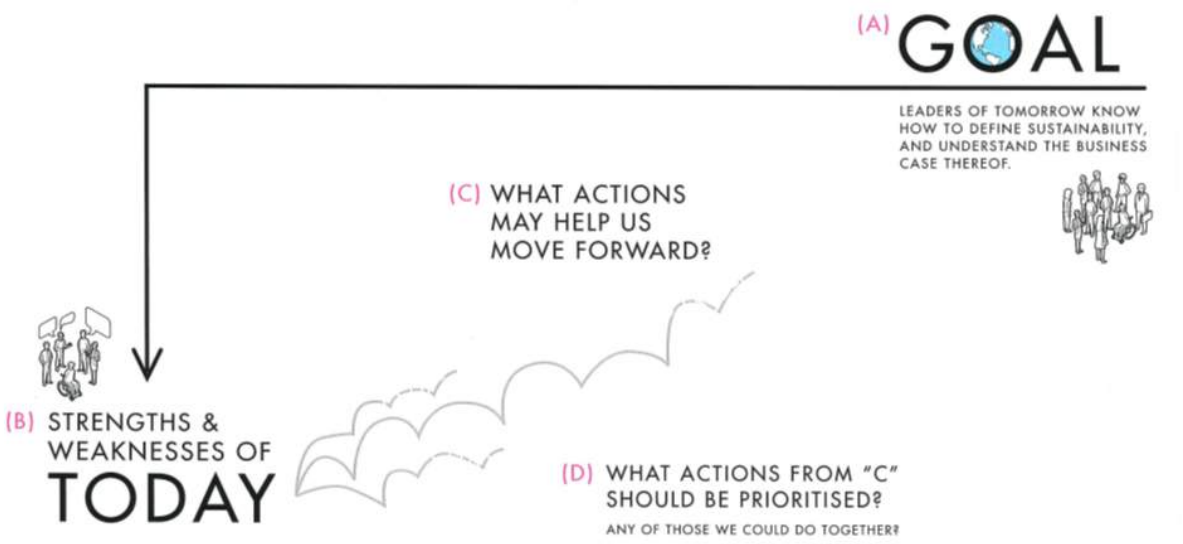
This document summarizes the third of four rounds of dialogue among Registered Dietitians and Nutritionists exploring sustainable food systems that promote healthy diets in Canada. It is not a final document for circulation, but a summary for participants in this research to consider in the lead up to the final stage of this research, the face-to-face workshop.

CONTENTS

In this summary you will find:

THE PROCESS

We are building towards "backcasting from success," a process which begins by defining a vision that is possible in a sustainable society (A), analysing the current reality (B), and then harnessing the creative tension in the gap between A & B to innovate!



As a profession, we are so familiar with the importance of evaluation. In this process we are also brainstorming (and then prioritizing) indicators which will help us to track progress towards our vision of success.

Know that while we may not finalize this entire process at the workshop June 7th, we will maximize member input such that the DC Sustainable Food Systems Leadership Team will be well positioned to move forward with the input of broad member perspectives. Thanks for your input thus far, and we hope to see you in St. John's!

The purpose, vision and barriers sections have been updated with your third round of feedback. We have highlighted major wording and conceptual changes using blue font to save you time reviewing the changes.

VISION

The purpose of human food systems is to provide nutritious, safe, and high-quality food and water that supports human health and welfare.

OUR VISION OF SUCCES
FOR SUSTAINABLE FOOD SYSTEMS IN CANADA

Sustainable food systems (SFS) in Canada serve this purpose, while stewarding and enhancing ecosystems, and respecting the needs of other species in those ecosystems. They prioritize biodiversity, fertile soils, clean water, and clean air by using resources at a rate they can sustain, within and outside national borders, and through responsible use of materials and energy along the entire the supply chain. They strive to be "closed loop" in that energy and materials produce minimal waste, and waste is cycled back into the system (e.g., composting, use of packaging that is biodegradable or reusable, and and fueled by renewable energy).

SFS in Canada also support and enhance the human social systems, now and for generations to come.

They are sovereign[1] and self-sufficient while supporting other countries' food sovereignty. A collaborative network of food system actors (producers, processors, retailers, consumers, etc.) share decision making power, resources and returns equitably. These networks support viable, intergenerational livelihoods, and genuine consumer choice.

Food Sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems.

They support food literacy.[2] The systems are transparent (e.g., food labelling, industry activities, etc.), traceable and trustworthy. Canadians have the capacity to produce, access, and prepare food, reflect and act on the socioecological implications of their food choices.

Food literacy is the ability to "read the world" in terms of food, thereby recreating it and remaking ourselves. It involves a full-cycle understanding of food—where it is grown, how it is produced, who benefits and who loses when it is purchased, who can access it (and who can't), and where it goes when we are finished with it. It includes an appreciation of the cultural significance of food, the capacity to prepare healthy meals and make healthy decisions, and the recognition of the environmental, social, economic, cultural, and political implications of those decisions.

They support equitable and just access to food for all Canadians in a manner that is empowering, inclusive, dignifying and respectful. Healthful foods are affordable and available for all Canadians, including marginalized and remote communities, in particular indigenous and Northern communities.

They support a healthy relationship with food, such that Canadians value food, its origin and quality, and express identity and culture through foods.

All of these core values are reflected in institutional settings (schools, workplaces) and Canadian food policy.

[1] La Via Campesina. For more: https://foodsecurecanada.org/who-we-are/what-food-sovereignty

[2] Sumner, 2013. Food Literacy and Adult Education: Learnign to Read the World by Eating. The Canadian Journal for the Study of Adult Education. 25,2 May/mai 2013 79–92.

The governance of sustainable Canadian food systems involves multiple stakeholders in a reflexive process that honours traditional and expert knowledge, to continually support dynamic change in our system. Governance applies a precautionary principle* to decision making at all levels, in order to achieve the above vision.

Responsibility in the system, including the ecosystems on which it depends, is also shared by stakeholders, and this responsibility is enforced. The above is captured in a comprehensive Canadian Food Policy.

VISION OF DIETITIANS
IN SUSTAINABLE FOOD SYSTEMS

Canadian nutrition professionals take an active leadership role in food system governance, guided by current evidence on food in a sustainable society.

* **The precautionary principle** implies that there is a social responsibility to protect the public from exposure to harm. It states that if an action or policy has a suspected risk of causing harm to the public, or to the environment, in the absence of scientific consensus (that the action or policy is not harmful), the burden of proof that it is not harmful falls on those taking that action.

Definitions vs. Visions vs. Plans of Action

In response to a call to define sustainability, or food systems to work from, we are again including this section which articulates the definition of sustainability that underpins this research process.

As researchers, we are using a principled approach to defining sustainability, rooted in biophysical and social sciences[3]. We assume that there are fundamental "laws," or principles, that govern the sustainability of ecosystems and social systems. For a society to be sustainable, these principles must be adhered to.[4] *Sustainable food systems are those that are governed by the basic principles of sustainability*. See Appendix 1 for a list of these priciples.

The principles simply state what you can not do. By not being prescriptive in nature, the principled approach provides ample, flexible space for innovation and design. In that way, a vision for sustainable food systems can be designed in many possible ways, so long as it does not violate the principles; if it does, it is unsustainable by default. As long as our vision is bounded by sustainability principles, we can then "backcast" from a desirable future (the vision), working backwards to create a flexible plan of action that will bring us in the right direction -- connecting the present to the future vision of success.

That plan is where time-bound issues (like access to farmland) get addressed by appropriate actions. It is also the place where expert (that's you, RDs) evaluation of the situation, and planning for action can be performed in a way that is inclusive, innovative, and community building -- that is to say legitimate. It is also the stage at which it is valuable to include values, norms, beliefs, emotions in the visioning and planning, as they bring transformational power beyond boring laws.

3 - Broman, G.I, & Robèrt, K-H. "A Framework for Strategic Sustainable Development." Journal of Cleaner Production, 2016. doi:10.1016/j.jclepro.2015.10.121. See Appendix 1 for the exact wording of these principles.

4 - Examples include not systematically degrading nature at a rate faster than it can regenerate (e.g., cutting forests), or not embedding obstacles to equity in our social systems such that certain groups systematically face partial treatment (e.g., voting rights for some but not all).

5 - Broman, G., et al. Science in Support of Systematic Leadership Towards Sustainability. Journal of Cleaner Production. Vol. 140 (2017). P. 1-9.

BARRIERS
TO OUR VISON

The barriers that you collectively described are organized according to how they stall progress towards our vision, and violate the basic principles of a sustainable system. We also highlight what we interpret as "upstream," or root cause barriers. In this way, we are creating a type of baseline assessment. The gap between this baseline, and the vision, become our play space -- for creative solutions to emerge. See the list of emerging actions for inspiration!

BARRIERS
TO ECOLOGICAL SUSTAINABILITY

Our ecological systems are being systematically degraded by human food system activities. Ecological systems can be degraded by physical destruction. For example, monocultures and urban sprawl over fertile land both destroy valuable ecosystems. They can also be degraded by chemical toxicity. For example, eco-toxic pesticides and fertilizers, which accumulate in the soils and limit the soil functions (nourishing plants, cleaning water), which in turn affects our ability to produce enough, or safe food. They can also be degraded by the release of greenhouse gases through, for example, decomposing food waste, animal protein-based diets, and frivolous transport of foods using non-renewable and carbon-based fuels. These powerful greenhouse gases accumulate in our biosphere and contribute to climate change.

Climate change itself is a barrier to our vision, and another good example of how food system activities and ecological degradation affect one another. The steadily increasing global temperatures, which the food system is contributing to, are causing changes in weather patterns, affecting soil and water systems, and consequently food production. This is a global phenomenon, so it undermines our vision of respecting other countries' sovereignty.

Upstream structural factors that underlie increasing urban sprawl, food waste, non-renewable fuels, and climate change, are twofold: political, and cultural. The lack of a comprehensive food policy backed by legal mechanisms, and political leadership that ignores climate change in their decision making, both undermine sustainable food systems. Current mechanisms are not coordinated, and do not encourage sustainable innovation, but do allow for the externalization of the social, health and ecological costs of food and water (e.g., the destructive processes described above). The weak political support for SFS is in part due to our limited ability to measure ecological health, limited monitoring, and limited use of the available data in informing policy. Better data would support regular tracking and re-evaluation of the system, and the policies supporting it. We also have a broader cultural expectation for access to a variety of foods at all times (e.g., in particular imported and out of season fruits and vegetables all year round) that is contributing to food waste, and heavy use of nonrenewable fuels. Further, many of us lack the skills to integrate plant-based proteins in our diets.

BARRIERS
TO SOCIAL SUSTAINABILITY

Human social systems can be undermined by barriers to health. For example, the ubiquitous nature of ultra-, and processed foods, which are heavily marketed, and the relative price of whole foods (particularly fruit and vegetables). Dangerous working conditions and inadequate wages in the agriculture sector also act as barriers to human health. Two underlying structural obstacles stand in the way: inadequate regulation and a

culture that does not prioritize the healthfulness of our food. Examples of inadequate regulation included the lack of taxes, subsidies, and quotas that could incentivize consumer behaviour and industry reformulation, and inadequate monitoring of meaningful and measureable outcomes in our food safety monitoring system. Furthermore, we do not monitor or enforce the *health quality* of our food (only the safety). A consumer culture that de-prioritizes time for food -- planning, preparing, and enjoying -- and is supported by a strong medical system to "fix" diet-related illness, is also not demanding regulatory support for a healthy food environment. This influences generational food preferences, creating a positive feedback loop that increases consumer demand for convenience foods.

Human social systems are also undermined when there is an imbalance of whose voice is heard; a barrier to influence in the social system. Barriers to voice, or influence, in the system, include a lack of interdepartmental and intersectoral communication about sustainability in our food systems, a lack of interprovincial and international coordination (e.g. with the USA), a concentration of power among a few key, multinational food companies, aggressive marketing of unhealthy foods (especially to children), and overrepresentation of industry in government lobbying. While there were many more examples, they can be captured by two upstream things. First, power imbalances in the system are entrenched, and resistant to change, and second, a political environment where economic outcomes trump health, social and environmental outcomes in food system decision making. These "voices" shape international and national regulations and allows for the externalization of costs mentioned above.

Social systems can also be undermined by barriers to skills and capacity building -- barriers to learning and developing competence, in particular as it relates to sustainability and food literacy. Lack of public awareness of the social, health and ecological "cost" of food choices, competing food messages from media and pseudo-professionals, inadequate food labelling, exclusion of sustainability concepts from tools such as the national food guide, and lack of food system and sustainability education in public schools and dietetic training are examples of barriers to food literacy. Further downstream there is even a simple lack of infrastructure in institutional kitchens to teach, or do, unprocessed food provision.

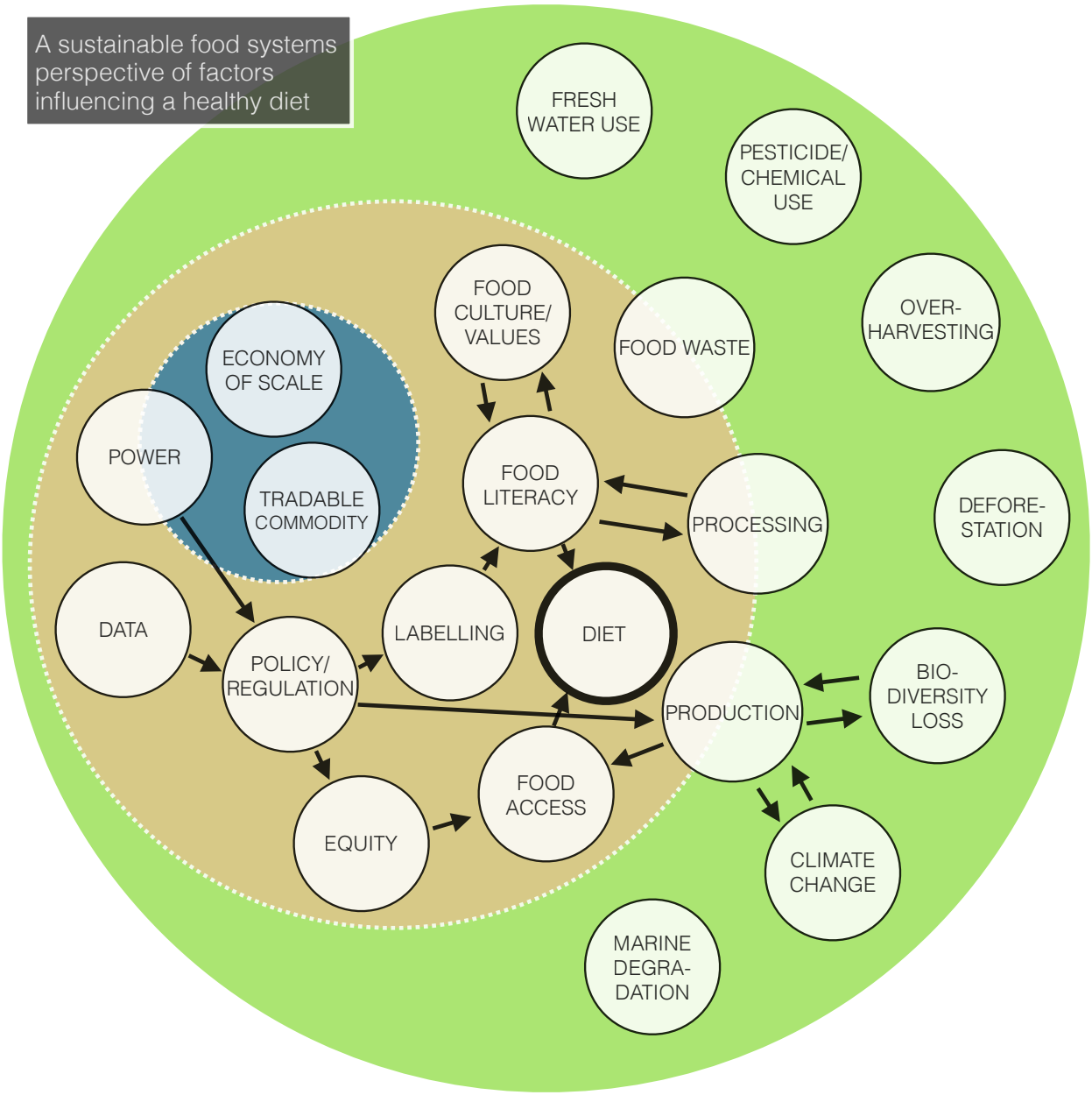
There is a need for a "food systems lens" to thinking about and govern the food system. A food systems lens acknowledges the many different actors and processes in a food system, emphasizing the relationships between them, to understand food issues. Without adequate transparency, there are structural obstacles to informed consumer choices and "good behaviour" on the part of food producers, processors, retailers, etc. who are providing food to the system.

One of the most obvious conditions that undermines the human social system is inequity, when people are systematically exposed to partial treatment. Access to healthy food for low income and geographically isolated communities are of paramount concern, where food deserts, the relative cost of healthy and sustainable food options, and the cost of transportation (e.g., to the Northern, and isolated communities) create inequitable conditions. Further downstream, there are logistical and political barriers to redistributing food waste that could help meet temporary food shortages. Looking upstream, incomes, relative to the cost of living, create structural obstacles to equity. Further, the culture of "economies-of-scale", where economic structures favour larger and more intensive systems (farms, retailers, etc.) and open borders (e.g. free trade) contribute structurally to the relative income inequality and marginalization.

Human social systems can also be undermined by the barriers to our ability to create meaning -- meaning derived through food. The requirement for, but limits to, federally inspected meat in institutions like schools is particularly challenging for communities trying to purchase *meaningful* local, traditional, or country foods. This is especially relevant in Indigenous and Northern communities. Too many Canadian's don't prioritize (assign much meaning to) food. Or, rather, we value taste and convenience over health and sustainability. This forms a "chicken-or-egg" scenario with the proliferation of products on the market driving, or driven by, these food choices. This is exacerbated by increasingly busy lives, and dwindling food skill.

Policies enforcing food as a "tradable commodity" underlie cost externalization and perpetuate food production "for feeding the world rather than families." This results in a growing figurative and literal distance between people and their food, undermining meaning-making, among other things. And finally, the ways our decision making structures devalue different ways of knowing (e.g., traditional, Indigenous knowledge), creates structural obstacles to meaning making.

Across all themes, you also identified resistance to change as an overarching barrier. Among people there is *inertia* in the way things are currently done, and a feeling that one person's actions cannot overcome that inertia. For those benefiting most from the current system, If there is a gap between where we are, and where we need to go, change will be part of that journey, and understanding the worldviews of those most resistant to change will help in leveraging effective change.



Above figure illustrate examples of barriers to sustainable food systems, highlighting some key relationships between policy, environment, and diet. Please note that this is not a comprehensive list of factors or relationships. -We invite you to pencil in more!

ACTIONS

This list can be treated as a "brainstorm" and still includes all of the suggested actions. Though it is organized so similar actions appear together, it has yet to be screened and prioritized. To save you reading time, you will find any new actions have been italicized.

NATIONAL LEVEL ACTIONS

- form coalitions with other groups who have similar goals

ECOLOGICAL SUSTAINABILITY

- Reduce subsidies for animal agriculture
- Advocate for restrictions on, and taxing of, carbon
- Advocate for food waste reduction policies
- Advocate for the use of a precautionary principle in environmental, food and agriculture law
- *Advocate for collaboration between the Departments of Agriculture and Health*
- *Investigate successful paradigm shifts (towards an eco-sensitive) in other countries, as models.*

HUMAN HEALTH

- Advocate for prohibition of marketing unhealthy foods, especially to children, via all media
- *Monitor the media for misleading advertisement and report infractions*
- *Monitor the effects of marketing restrictions*
- Advocate for tax incentives for maintaining a healthy BMI
- *Advocate for tax incentives for healthy behaviours (physical activity, fruit and vegetable intake)*
- *Monitor the effects of consumer dis-/incentives*
- Advocate for consumption-based taxes on "unhealthy" foods (e.g., sugar or fat tax)
- Advocate for marketing of sustainable foods
- Advocate for a subsidy, or tax credit for farmers who produce fruit and vegetables
- Advocate for supply chain management (to avoid subsidies)
- Advocate for monitoring and reporting on the health of the food supply chain (e.g. CFIA?)
- Advocate for Agriculture (Dept.?) to share responsibility for human (diet-related) disease
- Advocate for a shared vision of "health diets" between departments of Agriculture and Health
- *Advocate for reduction or diminishing junk food at point-of-purchase in groceries, pharmacies, and (trusted health) businesses*

SOCIAL SUSTAINABILITY

- Fund more sustainable food research, across the value chain
- Fund more action/research for food security, including measurable actions for RDs
- Fund (continue to) food costing research
- Include sustainable food systems in RD degree, internship curriculum
- Support improved K-12 school curriculum for food skills, agriculture and food systems
- Create high quality self-assessment tools for individual SFS behaviour
- Advocate for sustainability concepts in national food guidance

- Advocate for funding for new, sustainable farmers
- Advocate for adding a food security indicator (as per PROOF) in mandatory national census
- Advocate for food sustainability indicators to the national census
- Advocate to monitor national relative food self-sufficiency
- Create (more structured) interprofessional collaboration opportunities around food
- Create inter-disciplinary, -sector, and -community educational opportunities (in & post-degree)
- Advocate for a National Young Farmers program to support networking and development
- Advocate for food labelling laws that include additives in foods
- *Advocate for food labelling laws that promote transparency and ease of understanding*
- *Advocate for consistency and legislation in food labelling of the terms: organic, free range, pasture raised, "free from…"*
- Advocate for Canadian Food Policy (collaboratively developed) that ensures sustainable food
- Advocate to subsidize foods that contribute to sustainable food systems (whole foods)
- Advocate for increased the minimum wage/living wage
- Advocate for all Canadian food production (not just organic)
- Participate in international meetings about sustainable food systems
- Find and educate allies in government to foster political champions for this cause
- Support a re-examination of current food trade structures vis-à-vis sustainability
- Advocate for careful avoidance of food patents and monopolies in the system
- Advocate to subsidize local foods
- Advocate to not import food that we produce and export
- Advocate for stringent import laws (limit import to foods not grown here)
- Advocate for protective tax/levy on imported foods
- Advocate for reasonable access to imported foods to support diversity and acceptable foods
- Advocate for policy that supports home based and local businesses (food based?)
- Advocate for increased access to dietitians' services, notably in the retail sector
- Scale up community food (access) programs to national level
- Advocate for poverty reduction strategies
- Advocate for the economic rights of migrant workers
- Advocate for the stabilization of farm incomes, living wages for farmers
- *Advocate for increased inspection/existence of abattoirs in the North*
- *Advocate for the Nutrition North Canada program to target vulnerable populations*
- *Advocate for "realistic" expectations about what foods are available (seasonal, local).*
- *Advocate for transparency and more research in the new-product process*

LOCAL LEVEL ACTIONS

- *Local actions should align with the national directives*
- *establish a network to share provincial and local initiatives*
- *Needed actions can be summarised by: "advocacy, funding, education and creation"*
- *"RDs should be leading this movement -- own it -- as part of our practice… "*
- *Increase information sharing between producers, processors and consumers*

ECOLOGICAL SUSTAINABILITY

- Provide food skills for food waste reduction (e.g. menu planning)
- Support local food initiatives (CSAs, markets, farm-to-institution programs)
- Support food waste reduction strategies (e.g., portion alternatives in restaurants, use of bumper crops, sales of "ugly" foods, etc.)
- Support and encourage plant-based diets
- Emphasize locally produced foods and seasonality in education work
- Support knowledge dissemination around non-toxic fertilizer and pesticide alternatives
- Advocate for evidence-informed sustainable production practices (examples provided: crop rotation, agroecology, non-GMO)
- Support/advocate for innovations in renewable water use
- Explore forest-based food production opportunities

HUMAN HEALTH

- Support fruit and vegetable access and programs in schools, in conjunction with agriculture
- Promote fruit and vegetable consumption
- Provide public education on impacts of excessive consumption
- *Provide public education on the impact of all forms of malnutrition*
- Support school breakfast programs
- Support healthy eating programs in public facilities (e.g., recreation centres)
- *Foster/support positive relationship with food*
- *Advocate for mandating healthy food, fruit and vegetables in recreation settings, all public buildings*

SOCIAL SUSTAINABILITY

- Clearly define a SFS in Canada
- Create public resources, such as a DC cookbook for sustainable food
- *Create a resource to support backyard gardeners to use, preserve their harvest*
- Create self-assessment tools (e.g., how sustainable are your food habits)
- Support household and community level food growing activities (e.g. gardens, seed saving)
- Be ready to build the case for sustainable food in professional/appropriate language
- Learn more about sustainable foods, lead by example
- Dispel common misconceptions on SFS
- Continue to be a source of reliable and credible information
- Assess the current knowledge and needs of Canadian dietitians
- Create education tools for our client groups and RDs about SFS, offer through DC
- Use a food lens applied in education and decision making
- Contribute nutrition expertise to research collaborations on SFS
- Create an official DC position on SFS, and strategy for implementation
- Create tools to for RDs or GPs to identify income-related food insecurity in clients
- Create nutrition-based roles in provincial health divisions to foster interdisciplinary work
- Create public campaigns (e.g. social marketing) around SFS
- Support innovative food solutions in isolated communities (e.g. in the North)
- Support the use of technology to ensure quality and consistency in product and price
- Facilitate partnerships between local food producers and supply chain managers.
- Decouple RD-led purchasing from private sector affiliations/contracts (conflict of interest)
- Understand and discuss food production practices within our communities of influence
- Be a/create a social/media presence on healthy/sustainable
- Promote the work of "champions" in this area
- Incorporate sustainable choices into RD retail roles
- Advocate to fund local and provincial food policy council creation and continuation
- Assist food banks to engage in advocacy and other medium to long term food security work
- Encourage and facilitate increased retail support for locally grown foods (e.g., % local quota)
- Support the development of regional food hubs (to support small-med sized farms)
- Advocate for food systems perspective in community design and planning
- Supporting emergency food systems: local food banks, soup kitchens, gardens
- Promote access to community gardens
- Advocate for industry/retail to address food deserts
- Promote nutritious cultural foods, (esp. for new immigrants, Indigenous, and remote communities)
- Celebrate (and encourage celebration of) the social aspects of food
- Emphasize the "fun" (not just the sustainability challenge) in SFS and food programming
- Focus on food to unite families, communities, and various groups
- *Create a local, low-cost food "repository" for food excess (that would become waste)*

FOOD SYSTEM INFRASTRUCTURE

- Support more infrastructure for food production and (light) processing in communities
- Support the use of "untapped space" for food production (urban lots, etc.)

AREAS OF DISSENT

There were questions about and some opposition to some of the suggested actions.

There is a need for more clarity on "explore forest-based food production opportunities" as an action.

There was opposition to advocating for tax incentives to maintain a healthy BMI, with the rationale that this falls into the dangerous territory of fat-shaming, in addition to the arguments presented under indicator dissent.

Some also questioned tax incentives for producers growing fruit and vegetables, but not offering the same to those producing legumes, fish or other healthy foods. The rationale was that perhaps it makes more sense to provide incentive for producing food in a sustainable way?

Some cautioned against creating a DC cookbook, or the like, with the rationale that we do not want to duplicate efforts, or spend our resources (time, money) on something that may already exist. We would have to make sure what we are producing is unique.

There was strong opposition to consumption-based taxes, with the rationale that there is inadequate evidence to support it as an effective tool for change.

INDICATORS

This list can be treated as a "brainstorm" and still includes all of the suggested indicators, yet to be screened and prioritized. To save you reading time, you will find any new indicators are italicized. Dissent on specific indicators follows after the complete list, along with rationale for the dissent. Worth a read!

ECOLOGICAL INTEGRITY INDICATORS

- Arable land in use
- Number of farms growing a variety of food
- Percentage of agricultural land devoted to organic crops
- Utilization of farmland per province
- Number of, avg. size and geographical distribution of farms
- Soil health
- Health of water
- Pesticide use/residue
- Biodiversity markers
- Renewable energy use
- GHG emissions from sector
- Delta CO2 equivalents from food systems
- Ocean biodiversity
- Fish stocks
- Animal welfare vs. change in intensive feeding practices
  Wwaste reduction (measured at landfill)
- *Improvements in recycling and composting programs*
- *Existence of policy on use of ecotoxic waste (e.g., plastics)*
- *Political recognition of the food-sustainability challenge (yes/no?)*

SOCIAL INTEGRITY INDICATORS

- Government support for local food initiatives
- Number of policies promoting local food production, processing and/or distribution
- Employment rate in agriculture
- Demography of local food purchasers
- Age of farmers
- Delta local import ratios
- Annual capital infused into local economy per year from food purchasing
- Percentage of local food at retailer
- Citizen involvement in their food supply
- Number of healthcare institutions with policies for sustainable food procurement
- Dietitian advocacy power
- Traceability of the food supply
- Availability and use of resources for SFS education
- Education and promotion of sustainability
- Awareness of sustainable food
- Sustainability curriculum content
- Public knowledge about origins of food
- Knowledge about food waste prevention
- Knowledge about origin of food (distance traveled)
- Number of food literacy programs offered in communities
- Number of schools offering nutrition education
- Research in the field
- Tracking language and communication around food
- Sales of less than perfect fruit and vegetables
- Delta ratio rural vs. urban food prices
- Producer incomes
- Affordability and prices of food
- Living/minimum wages
- Price of healthy food basket
- Food bank usage

- Quantity of accessible food
- Number of people below poverty line/poverty rate
- Food scarcity in families/households
- Food security levels per province
- Cost of wholefoods
- Average distance for resident to grocery store
- Cost of health care
- Number of community gardens
- Poverty or income levels
- Number of policies supporting indigenous food practices
- Number of school gardens
- Food literacy levels
- Percentage of local food used in school food programs
- Children's perceived knowledge of food origin
- *Price ratio of local vs. imported foods*
- *Arable land used for human food production (separate from animal feed land)*

HUMAN HEALTH INDICATORS

- BMI (see dissent section below)
- Grocery & take out eating spending - breakdown based on the four food groups
- Consumption of animal-based vs plant-based foods
- Hunger
- Household cooking skills
- Healthy food baskets (incl. other personal needs)
- Delta prevalence of diet related diseases
- Delta economic and other determinants of health and food security
- Longevity
- Fruit and vegetable consumption
- Food and nutrition curriculum in schools
- Home cooked meals vs. take out ratio
- Whole food vs. processed food consumption
- Change in incidence of chronic disease
- Communities' ability to to impose healthy food sources on citizens
- Water quality and safety
- Common right to healthy environment
- Population health levels per province
- Percentage processed food in household diet
- Mental health development
- Percentage of minimally processed foods consumed by Canadians
- Food waste (animal based vs. plant based)
- Fish consumption
- Nutritional status when accessing health care
- Those managing 1 or more chronic conditions per age group
- Percentage of homemade meals consumed
- *Procurement policies and monitoring (re: healthy food)*
- *Percentage of food that meets standard of healthy diets*
- *Supports/incentives for a sufficient supply of vegetables and fruit*
- *Use of health services (clinic visits/reason for admission)*
- *Relative Risk outcomes of high-BMI: CVD, DM, Mental health*

FOOD SYSTEM INFRASTRUCTURE INDICATORS

- Weight & cost of food waste (household, industrial)
- Transparency (in labelling)
- Agriculture production reports
- Exports vs imports
- Local food availability over time
- Food prices in relation to value chain's share of profits and profit distribution
- Percentage of Canadian food in Canadian diets per capita
- Food bank/soup kitchen usage
- Outlets selling whole, nutritious foods (geographic representation)
- Food waste tonnage disposal to our garbage sites
- Demography of farmers
- Number of grocery stores and food markets per region
- Number of food system coalitions, networks etc. working towards SFS vs. food 'charity'
- Transparency levels in supply chain
- Transparency in food labelling
- Food charters at the provincial/Canadian level
- Emergency food/water available if trade stopped
- Food prices vs. income levels and costs of living
- Prices for minimally processed food vs ultra processed foods
- Percentage of food procurement that is local
- Ratio healthy food vendors vs. convenience/fast food in core neighbourhoods
- Number of independently owned and operated restaurants/cafes (not franchises) supporting local production
- Number of community food storage & commercial community kitchens for rent/public access
- Number of federally approved local processing plants
- Access to potable water
- Food charters at the local level
- Number of food charities involved in and supportive of long-term policy
- Percentage of local/sustainable food provided by large food service corporations

RD-SPECIFIC INDICATORS

- Number of RD's working in agriculture
- RDs perceived knowledge of SFS
- Relationships between RDs and individual food producers
- Completion of mandatory sustainability education for RDs

- Percentage of RDs that consider production methods in nutritional recommendations and policy.
- RDs influence in policy
- Number of RDs as SFS experts or advisors
- Percentage of RDs who perceive sustainable food systems as a priority
- Track consistency of language amongst RDs
- *Track consistency of language amongst RDs in all areas of agriculture, education, training and policy development.*

AREAS OF DISSENT

There was strong disagreement with the use of BMI as a measure of human health. Rationale for not using this measure include:

- It is a limited measure of health and should not be used on it's own.
- It is not a measure of nutritional health at all.
- It is not clearly linked to food sustainability.
- It does not adequately capture the complexity of malnutrition (over-, under-, and hidden malnutrition).

There was also disagreement with prevalence of diet-related diseases as indicators due to an unclear link to food sustainability.

There was disagreement with fish consumption as an indicator, because fish is not available in all parts of the country, and not culturally important to all Canadians.

FEEDBACK & HOW TO STAY ENGAGED

We want to hear from you about:

- Your remaining questions
- Any concerns that you would like to share
- Expectations for the workshop
- If and what you learned about sustainable food systems through this process
- What you are taking away from participating in this process
- What you liked about the process that we used
- What would have made it even better
- Any thoughts, wishes or hopes to send to colleagues participating in the workshop

Please go to the following link to provide anonymous responses, or feel free to email your responses to Jesper at: jrj@bth.se.

https://survey-system.acadiau.ca/index.php/447135?lang=en

To all of our committed research participants who are unable to attend the final workshop, we understand. Canada is a big place. Cost aside, it is also environmentally expensive to fly to St. John's for one day. However, we wish to offer you the opportunity to remain engaged, if you want to.

Therefore, you will all receive a copy of the pre-workshop package, and final workshop report regardless of whether you are able to participate in the workshop or not. We are also offering a pre-workshop webinar so that those of you who cannot attend the workshop on June 7th have a chance to stay involved.

In this webinar, you will have a chance to:

- Speak directly with the research team
- Respond to some of the key workshop discussion questions
- Provide your final thoughts on our vision, barriers, actions and indicators
- Provide feedback on the research process

The webinar will be either on May 22nd or 23rd, 11.00 - 12:30 EST (Toronto). Please email Jesper, jrj@bth.se to let him know which date you are interested in by April 30th. We will host the webinar on the day with the highest number of participants. Please note that we reserve the right to cancel the webinar if there are fewer than 5 participants. We will confirm the date for the webinar via email during the first week of May.

Thank you!

See you in May & June

APPENDIX 1: THE PRINCIPLES OF SUSTAINABILITY[6]

In a sustainable society, nature is not subjected to systematically increasing:

1. Concentrations of substances extracted from the earth's crust
E.g. fossil carbon and mercury

2. Concentrations of substances produced by society
E.g. CFCs and nitrous oxides

3. Degradation by physical means
E.g. overharvesting of wild foods and fish

And people are not subject to structural obstacles to:

4. Health
E.g. inadequate minimum wages

5. Influence
E.g. systemic exclusion of certain voices from positions of power

6. Competence
E.g. removal of food skills from universal education, inadequate food labelling or enforcement

7. Impartiality
E.g. discrimination or unfair selection to job positions

8. Meaning-making
E.g. regulations which exclude cultural foods from public menus

The principles simply state what you can **not** do in a sustainable society, leaving myriad opportunities for creative, innovative solutions.

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6 - Broman, Göran Ingvar, and Karl-Henrik Robèrt. "A Framework for Strategic Sustainable Development." Journal of Cleaner Production, 2016. doi:10.1016/j.jclepro.2015.10.121.