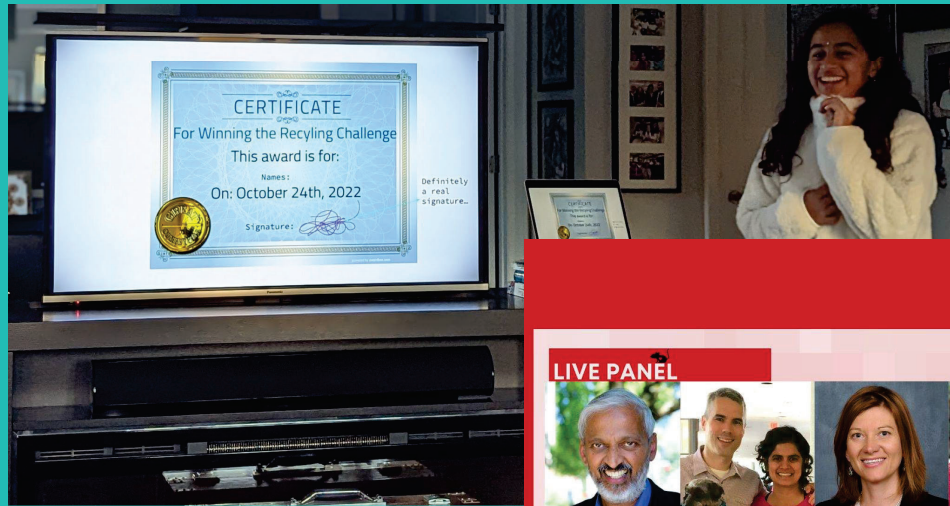
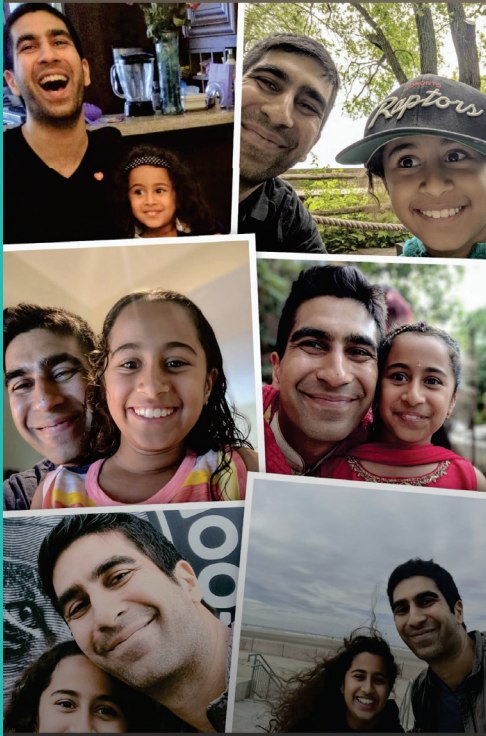

Accelerating Toronto's Climate Action Through Food

Toronto Budget Subcommittee - Jan 18, 2023

Nital Jethalal

Meet Kareena



LIVE PANEL

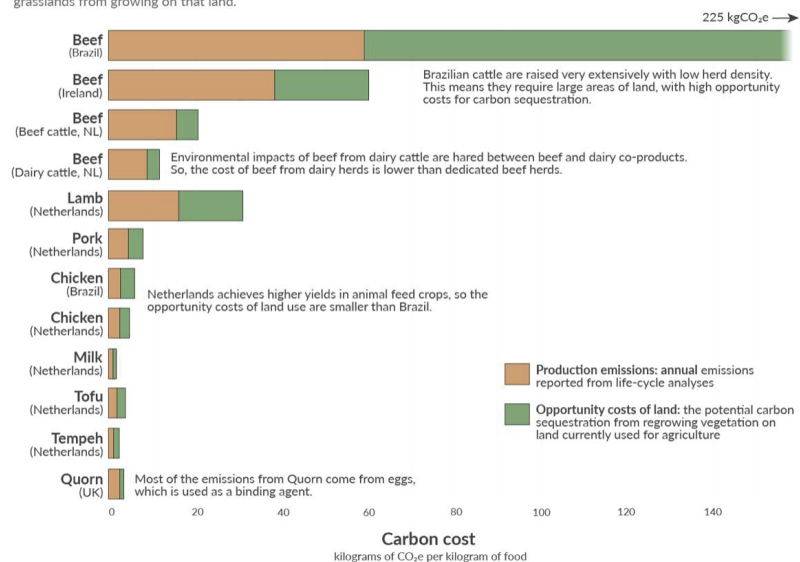


Animal Advocacy at
Work, School, and in
Communities

Tue. Feb. 2 | 7:00-8:30pm ET
animaljusticeacademy.com

What are the carbon costs of different foods?

Total carbon costs is the sum of greenhouse gas emissions from food production, plus the opportunity costs of land. Using land for agriculture – either crops or pasture – prevents natural vegetation such as forests, or wild grasslands from growing on that land.



Source: Schmidinger, K., & Stehfest, E. (2012). Including CO₂ implications of land occupation in LCAs – method and example for livestock products. OurWorldinData.org – Research and data to make progress against the world's largest problems. Licensed under CC-BY by the author Hannah Ritchie.

Food has a HUGE impact on climate...

Food has a HUGE impact on climate...

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Article | [Published: 08 March 2021](#)

Food systems are responsible for a third of global anthropogenic GHG emissions

[M. Crippa](#) ✉, [E. Solazzo](#), [D. Guizzardi](#), [F. Monforti-Ferrario](#), [F. N. Tubiello](#) & [A. Leip](#) ✉

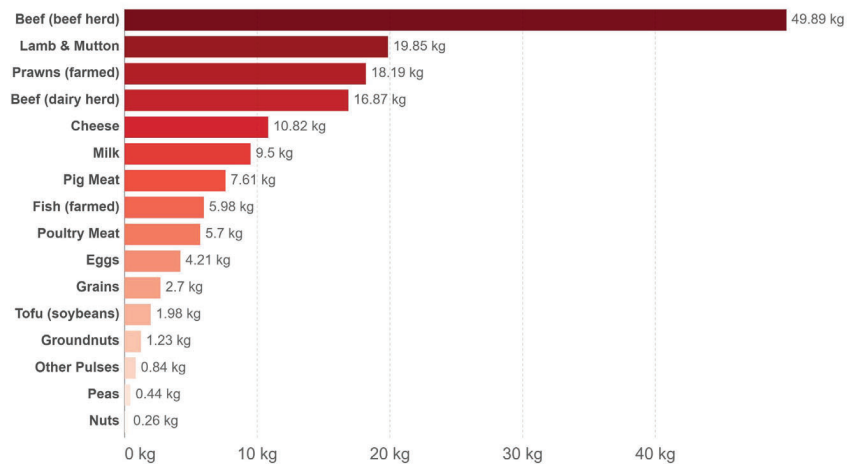
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[Nature Food](#) **2**, 198–209 (2021) | [Cite this article](#)

Greenhouse gas emissions per 100 grams of protein

Greenhouse gas emissions are measured in kilograms of carbon dioxide equivalents (kgCO₂e) per 100 grams of protein. This means non-CO₂ greenhouse gases are included and weighted by their relative warming impact.

Our World
in Data



Source: Poore, J., & Nemecek, T. (2018). Additional calculations by Our World in Data. OurWorldInData.org/environmental-impacts-of-food • CC BY

...and animal-based foods have a much bigger impact

Article | [Published: 13 September 2021](#)

Global greenhouse gas emissions from animal-based foods are twice those of plant-based foods

[Xiaoming Xu](#), [Prateek Sharma](#), [Shijie Shu](#), [Tzu-Shun Lin](#), [Philippe Ciais](#), [Francesco N. Tubiello](#), [Pete Smith](#), [Nelson Campbell](#) & [Atul K. Jain](#) 

[Nature Food](#) **2**, 724–732 (2021) | [Cite this article](#)

9799 Accesses | **89** Citations | **3004** Altmetric | [Metrics](#)

Excluding animal products from diets reduces:

🌍 Food's land use by 3.1 billion ha (a 76%↓), including 19% arable ↓;

⚠️ Food's GHGs by 6.6B metric tons of CO₂eq (a 49%↓);

☠️ Acidification by 50%;

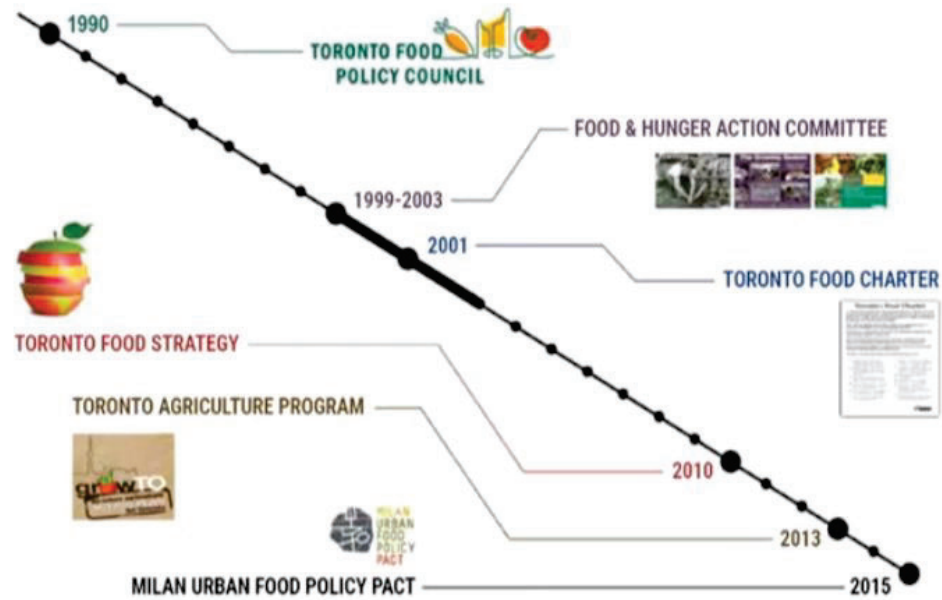
☠️ Eutrophication by 49%; &

💧 freshwater withdrawals by 19%

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

...and the impact
is far beyond
climate

City of Toronto Municipal Food Policy Timeline





"Adopting dietary change is the consumption intervention with the greatest potential for emissions reductions"

C40, Arup, University of Leeds. (2019). The Future of Urban Consumption in a 1.5°C World.

Adopting dietary change is the consumption intervention with the greatest potential for emissions reduction. - C40

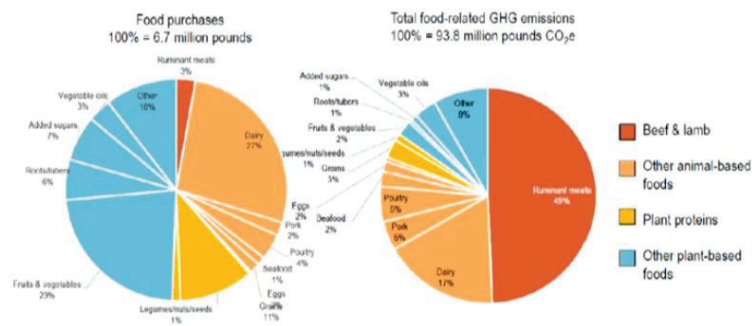
ACTIONS YOU CAN TAKE

1. Increase % of plant-based foods in procurement
 2. Make it easier for people to eat plant-based!
 3. Education the public
 4. Work with restaurants
 5. More widely implement the Canada Food Guide
 6. Endorse & implement the Plant-Based Treaty
-

1. More Plant-Based Food Procurement

TORONTO
Public Health

Food Purchases and food-related GHG emissions based on carbon calculator modelling an organization that feeds 10,000 people a year



Note: Data are illustrative for one Cool Food Pledge signatory serving approximately 3.5 million meals per year with food purchases proportional to the average U.S. diet in 2013.

Altogether, the City of Toronto influences the procurement of ~7M meals a year

2. Make eating plant-based easier!

GREENER BY
DEFAULT

Greener by Default can reduce your carbon & water footprint and improve health & inclusivity, all while keeping costs neutral and preserving freedom of choice.



Defaulting to plant-based foods increases their uptake by

60%



decreasing food's carbon footprint by

40%



and water footprint by

24%

3. Education & awareness

Acceptance and awareness of major health findings

| Established Finding | Skeptical | Unaware |
|---|-----------|---------|
| Red meat is a probable carcinogen | 45% | 21% |
| Veg*ns have lower risks of heart disease, diabetes & certain cancers | 31% | 26% |
| Processed meat is a carcinogen | 27% | 21% |
| Whole or low processed soy consumption reduces breast and prostate cancer | 20% | 57% |
| Improving gut health can reduce the severity of COVID-19 | 20% | 63% |

55% feel diets are healthier with animal products

4. Work with restaurants

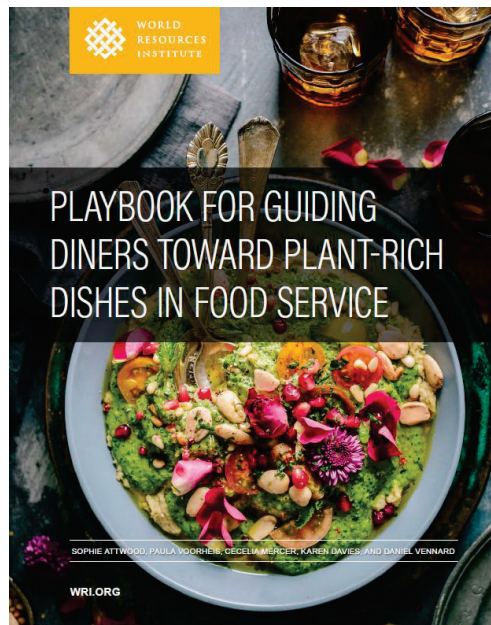
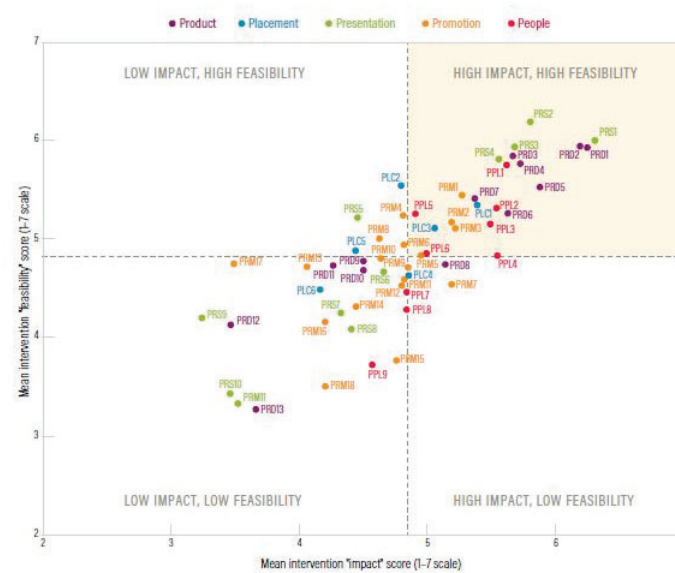
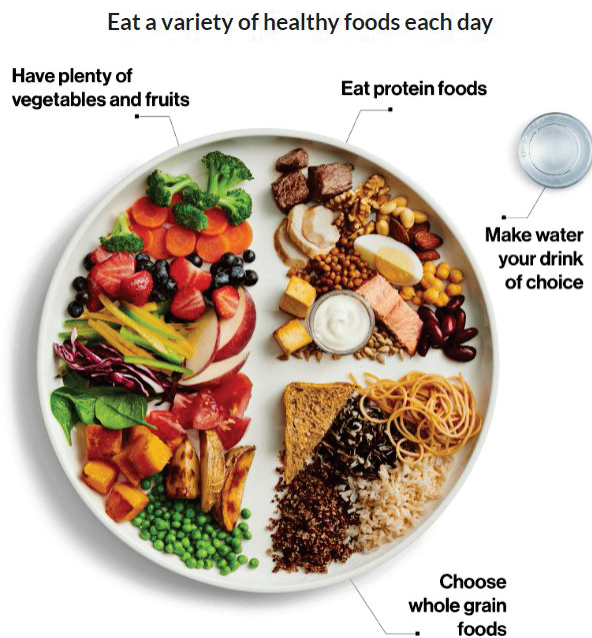


Figure 3 | Industry Representative Ranking of 57 Behavior Change Interventions

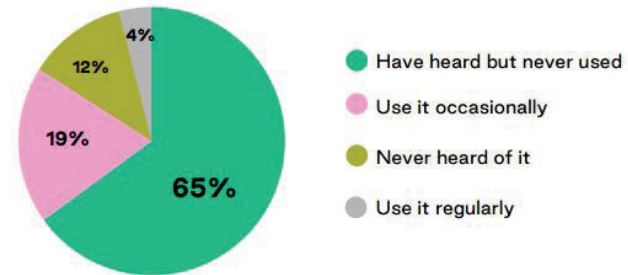


5. Wider implementation of Food Guide




Canada Food Guide Use

77% don't use or haven't heard of the Canada Food Guide



6. Endorse & implement the Plant-Based Treaty

THE CORE PRINCIPLES OF
PLANTBASED TREATY



1

RELINQUISH
Stop the problem increasing
No land use change, including deforestation, for animal agriculture

2

REDIRECT
Eliminate the driving forces behind the problem
Promotion of plant-based foods and actively transition away from animal-based food systems to plant-based systems

3

RESTORE
Actively healing the problem while building resilience and mitigating climate change
Restore key ecosystems and reforest the Earth.

6. PBT Cities Manual

- City Council Events
 - Subsidizing whole plant-based foods
 - Divestment
 - Taxation
 - Community Education
 - Advertising
 - Daycares
 - Cities partnering with schools
 - Community Education & Access
-

Toronto will support you!

85% of the GTA eat animal products daily...

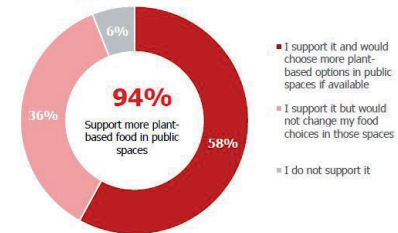
but ~2/3 want to reduce meat consumption



Plant-Based Offerings in Public Spaces

Nearly all GTA residents support more plant-based food being offered in public spaces, such as in schools, government buildings, hospitals or food courts. Women are more likely to say they would choose more plant-based options if they were available in public spaces, while men are more likely to say they support it but would not change their food choices in those spaces.

Support for Plant-Based Food in Public Spaces



Base: All respondents (n=1008)
Q11. How do you feel about more plant-based food being offered in public spaces (e.g., schools, government buildings, hospitals, food courts)?

THANK YOU
