
How Vendors Can Achieve Food-Related Greenhouse Gas Reductions: Examples from the Field

Panelists:

- John Stoddard, Healthcare Without Harm
- Dr. Anne Utech, Veterans Health Administration
- Clara Cho, World Resources Institute
- Alyssa Wooden, DC Dept. of Energy and Environment
- Laura Lee Cascada, Better Food Foundation

FEDERAL
GOOD FOOD PURCHASING
COALITION

Moderated by Allison Thompson, EPA



Agenda

- Welcome and introduction of panelists
- Opening presentations
- Panel discussion
- Q&A



Plant-Forward Menus at the VHA

John Stoddard, MS

Associate Director Food and Climate Strategies
U.S. Healthy Food in Health Care Program
Health Care Without Harm

Anne Utech, PhD, RD, LD

National Director,
Nutrition & Food Services for the Veterans Health Administration



March 12, 2024



As the only sector with healing as its mission, health care has an opportunity to use its ethical, economic, and political influence to create ecologically sustainable, equitable, and healthy communities.



A photograph of three people sitting around a table in a meeting, with a semi-transparent orange overlay.

**FOUNDATION
FOR
SUCCESS**

A photograph of a grocery store aisle with a semi-transparent orange overlay.

**FOOD
PURCHASING**

A photograph of a field of green vegetables with a red oval border and a semi-transparent green overlay.

**PLANT-FORWARD
FUTURE**

A photograph of food service workers in a kitchen with a semi-transparent teal overlay.

**HEALTHY
FOOD
ENVIRONMENTS**

A photograph of food waste and a compost bin with a semi-transparent yellow overlay.

**FOOD WASTE
SOLUTIONS**

A photograph of a community garden with a semi-transparent blue overlay.

**NOURISHING
COMMUNITIES**

practicegreenhealth.org/plantforwardfuture

Resources

- Implementation: recipes and meal planning
- Marketing and education: behavior change guidance, marketing collateral
- Tracking: document change over time

Making the case

- Arguments for a plant-forward meal program for 5 audiences in 3 areas: health, sustainability, the business case
- Case studies that show success is possible



practicegreenhealth.org/plantforwardfuture



EAT ONE PLANT-FORWARD MEAL EACH DAY FOR 30 DAYS TO WIN
Join your colleagues | Eat great food | Win prizes





- Madison, WI
- 3 hospitals in Cool Food: ~ 2 million meals annually
- Audited **recipe names** and changed accordingly
- Reviews and edits recipes to decrease animal proteins while adding plant proteins.
- Introduces culturally relevant foods
- **Educates on climate benefits**
- **Participates in the Health Care Culinary Contest and won in 2021**



AFGHAN-STYLE VEGETABLE KORMA

Submitted by Shehroze Semaatizade and Dan Hess at UW Health, Wisconsin

SERVES 6 | PORTION 1 1/2 cups

INGREDIENTS

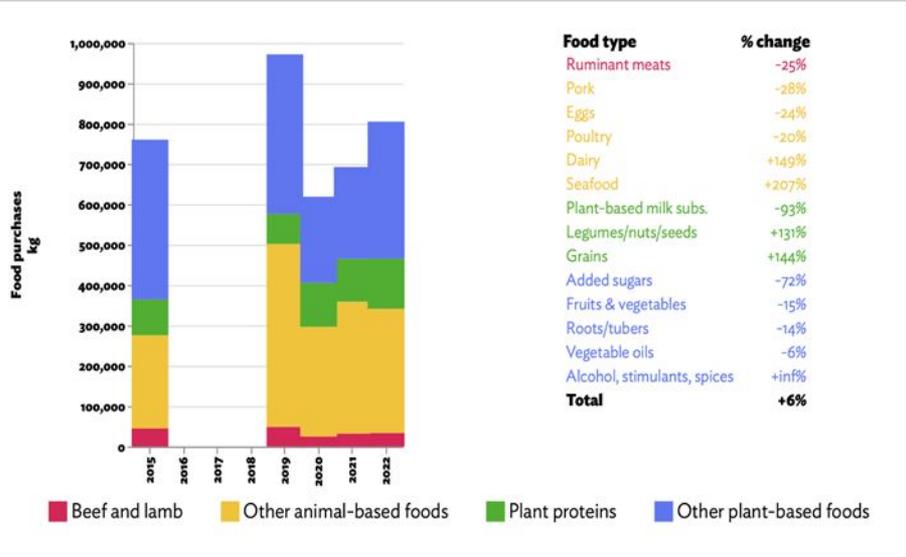
- 1x cup olive oil
- 1x cup yellow onion, small dice
- 1x teaspoon dried turmeric
- 1x teaspoon paprika
- 1x teaspoon ground black pepper
- 1x teaspoon granulated garlic
- 1x teaspoon turmeric powder
- 2 cups fresh tomatoes, small dice
- 1x cup tomato paste
- 1 1/2 cups hot water
- 2 cups green beans, cut in half
- 2 cups bell peppers, julienned
- 1 cup green onion, julienned
- 4 cups potato, small dice
- 2 cups garbanzo beans, rinsed and drained
- 1x cup fresh cilantro, chopped

PREPARATION

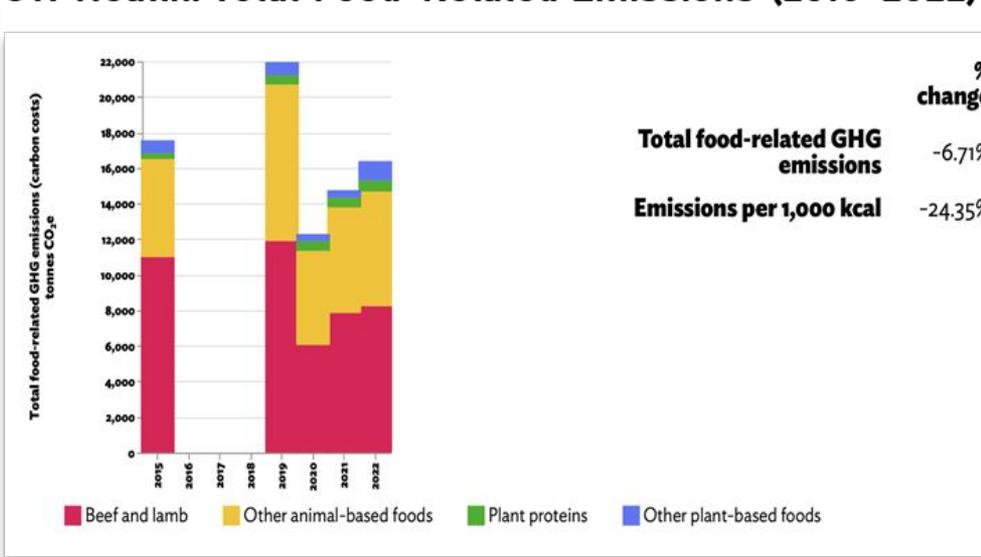
1. In a 6-quart pot or larger, heat olive oil on medium-high heat.
2. Add diced onion, coriander, paprika, black pepper, granulated garlic, turmeric, and sauté all ingredients for 5 minutes.
3. Stir in tomatoes, cover, and cook for 5 minutes.
4. Stir in tomato paste and cook for 5 minutes.
5. Pour in the hot water, bring to a boil and reduce heat to medium.
6. Stir in green beans and cook for 5 minutes.
7. Add peppers, julienned onions, and potatoes. Cover and cook until a white steam is steady into the potatoes, approximately 5-6 minutes.
8. Stir in garbanzo beans and cilantro.
9. Simmer for 5 more minutes.
10. Serve the Vegetable Korma on its own or with prepared basmati rice and naan bread.



UW Health: Total Food Purchases (2015-2022)

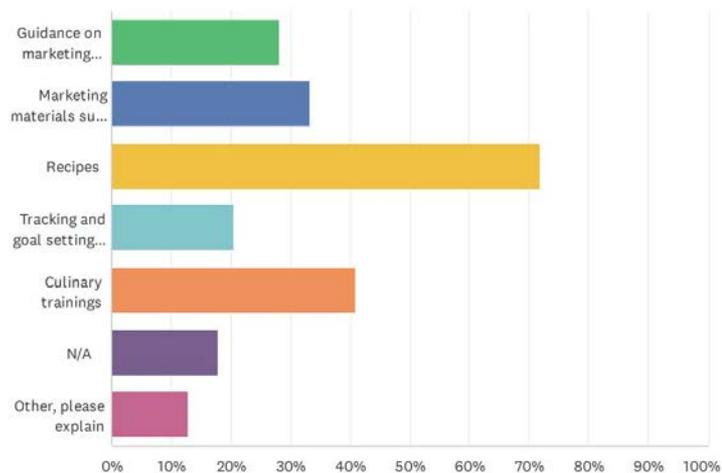


UW Health: Total Food-Related Emissions (2015-2022)



Q6 Which of the following would help you in your work to provide more plant-forward (reduced animal protein) dishes?

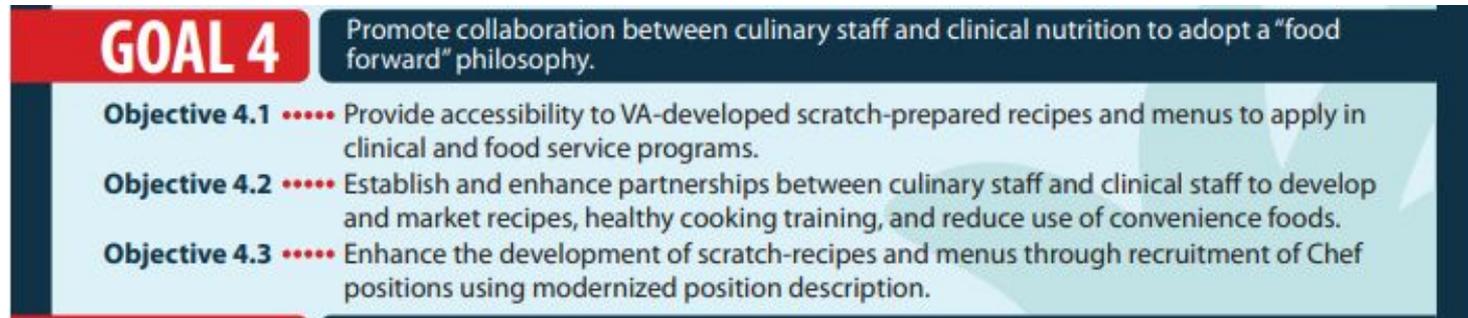
Answered: 39 Skipped: 0



ANSWER CHOICES	RESPONSES
Guidance on marketing plant-forward dishes to elicit behavior change	28.21% 11
Marketing materials such as posters or screen images	33.33% 13
Recipes	71.79% 28
Tracking and goal setting resources	20.51% 8
Culinary trainings	41.03% 16
N/A	17.95% 7
Other, please explain	12.82% 5
Total Respondents: 39	

Planning Sustainable Menus: Plant Based Recipe Trial

VHA National NFS Strategic Goals and National Diet Guidelines were starting framework



GOAL 4 Promote collaboration between culinary staff and clinical nutrition to adopt a “food forward” philosophy.

- Objective 4.1** Provide accessibility to VA-developed scratch-prepared recipes and menus to apply in clinical and food service programs.
- Objective 4.2** Establish and enhance partnerships between culinary staff and clinical staff to develop and market recipes, healthy cooking training, and reduce use of convenience foods.
- Objective 4.3** Enhance the development of scratch-recipes and menus through recruitment of Chef positions using modernized position description.

"...Strive to utilize responsible-use antibiotic proteins. Include plant based proteins: nuts, lentils and vegetarian entrees." - VHA Healthy Diet Guidelines

Recipe Trial Planning

- **VHA Food Service Green Environmental Management System (GEMS) Workgroup**
 - Been attempting plant-based recipes initiatives/database for ~ 3-4 years
- **Practice Greenhealth (PGH) Partnership**
 - PGH extended support to NFS on our goals -> lead to beginning development of our 11-site National Plant Based Recipe Trial
- **Humane Society of The United States (HSUS)**
 - PGH funding and partnership with HSUS allowed us to utilize their dietitians/chefs to train & teach our sites the foundations of "protein-swapping"



Plant Based Trial

- **Process**
 - Four week trial period
 - Used established facility recipes, only swapped protein
 - Eight swaps per facility
 - HSUS provided workshop, recipes for plant based proteins, support, final roundtable session
 - Eleven facilities (6%)
 - 17 initially signed up
 - Tasting trial
 - Patient evaluations
 - Plate waste studies

Outcomes

- 5,282 servings of animal proteins we're swapped with plant proteins
 - 36% replaced beef,
 - 21% replaced chicken,
 - 20% replaced turkey,
 - 15% replaced pork,
 - 2% replaced fish/shellfish
 - 7% replaced other animal proteins including eggs
- Most commonly used plant protein replacements
 - tofu (35%)
 - meat analog (29%)
 - beans or lentils (24)
 - vegetable dishes (6%), mushrooms (5%)
 - tempeh (0.04%).

Outcomes

- **Nutrition**

- *All plant forward recipes, when served as part of a complete meal, met the VHA Healthy Diet guidelines.*
- Plant forward recipes had 21 % fewer calories, and 47 % less protein per serving compared to an average of the traditional meat recipes .
- Plant forward recipes had 43 % less saturated fat as well as more potassium and fiber.

- **Financial**

- \$239 was saved over pilot period
- Protein analog offset savings
- *Scaled:* by replacing just two inpatient meals a week with plant-based meals, **\$168,134** would be saved per year – or **\$691,313** with only minimally processed plant protein swaps.

Outcomes

- **Greenhouse gas emissions**

- **57.6 metric tons** CO₂e (carbon dioxide equivalents) of greenhouse gas were avoided.
- **Scaled:** by replacing just 2 inpatient meals a week with plant-based meals, a total of **40,218 metric tons** of CO₂e would be avoided per year.
 - Comparable to avoiding **103 million miles driven** by an average gasoline-powered passenger vehicle or **7,825 homes' electricity** use for one year.

- **Patient satisfaction**

- Individual facilities reported seeing no difference in waste compared to a traditional meat-based healthcare meal, indicating positive consumer receptivity.
- Tofu crumbles were one of the patient favorites.

Lessons Learned

- **Keep familiar flavors**
 - Swap out an animal protein in an existing, well-received dish, keeping the same flavor profile and meal format.
- **Market menu items in enticing ways**
 - Focus on flavor – what is in a dish not what it is lacking
 - “chorizo-inspired burrito” rather than “tofu burrito.”
- **Build buy-in with staff**
 - Tastings, education
 - If staff are enthusiastic they convey that to the patients and become invested in trial’s success.
- **Ensure product availability ahead-of-time**
 - Engage prime vendor to ensure product availability.



Next Steps in Sustainable Menus



For 13 sites that participated – Support goal setting for specific % of menus to be plant based

Distribute and educate VHA field on its success and outcomes



Continuing our grass-root efforts to support further change to local and national policies

Hold additional trainings for VHA culinary staff.



Food Shifts Matter

If all Veterans Health Administration facilities replaced just two inpatient meat-based meals per week with plant-forward options, VHA would:

REDUCE greenhouse gas emissions by
40,218 metric tons of CO₂e per year



665,000 trees planted



103 million fewer miles driven



SAVE \$ that can be invested into higher
quality food for veterans



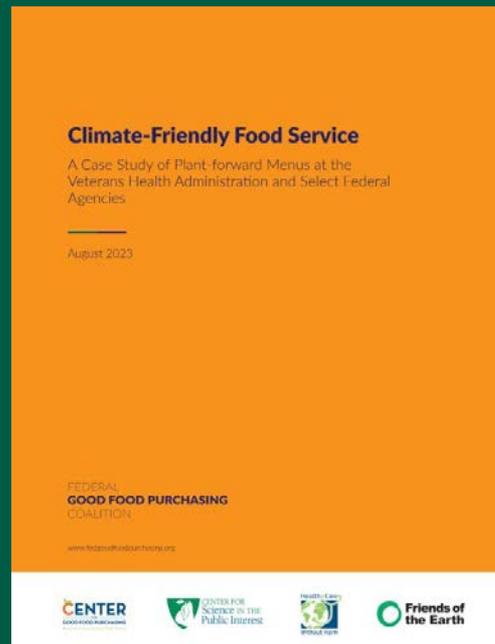
\$168,000 - \$691,000*



** Higher cost savings could be achieved by focusing on minimally processed plant proteins, which are typically more affordable and nutritious.*

Federal Climate-Friendly Food Service

A case study of plant-forward menus at
the VHA and select federal agencies



<https://www.fedgoodfoodpurchasing.org/resources/climate-friendly-food-service>

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Coolfood: Setting a Target for Climate Friendly Food Procurement

Clara Cho, Data Analyst
Coolfood, World Resources Institute





World Resources Institute (WRI) is a global research organization that spans more than 50 countries, working on a range of environmental issues.

WRI provides public and private sector organizations with:

- Tools to measure, manage and improve value chain risks and impacts
- Data and analytical tools



SCIENCE
BASED
TARGETS



Food
Loss + Waste
PROTOCOL



SCIENCE BASED TARGETS NETWORK
GLOBAL COMMONS ALLIANCE



GREENHOUSE
GAS PROTOCOL



Programs

- Climate
- Energy
- **Food, Land and Water (FLW)**
- Cities
- Ocean

Centers

- Economics
- Equity
- Finance



Coolfood Movement

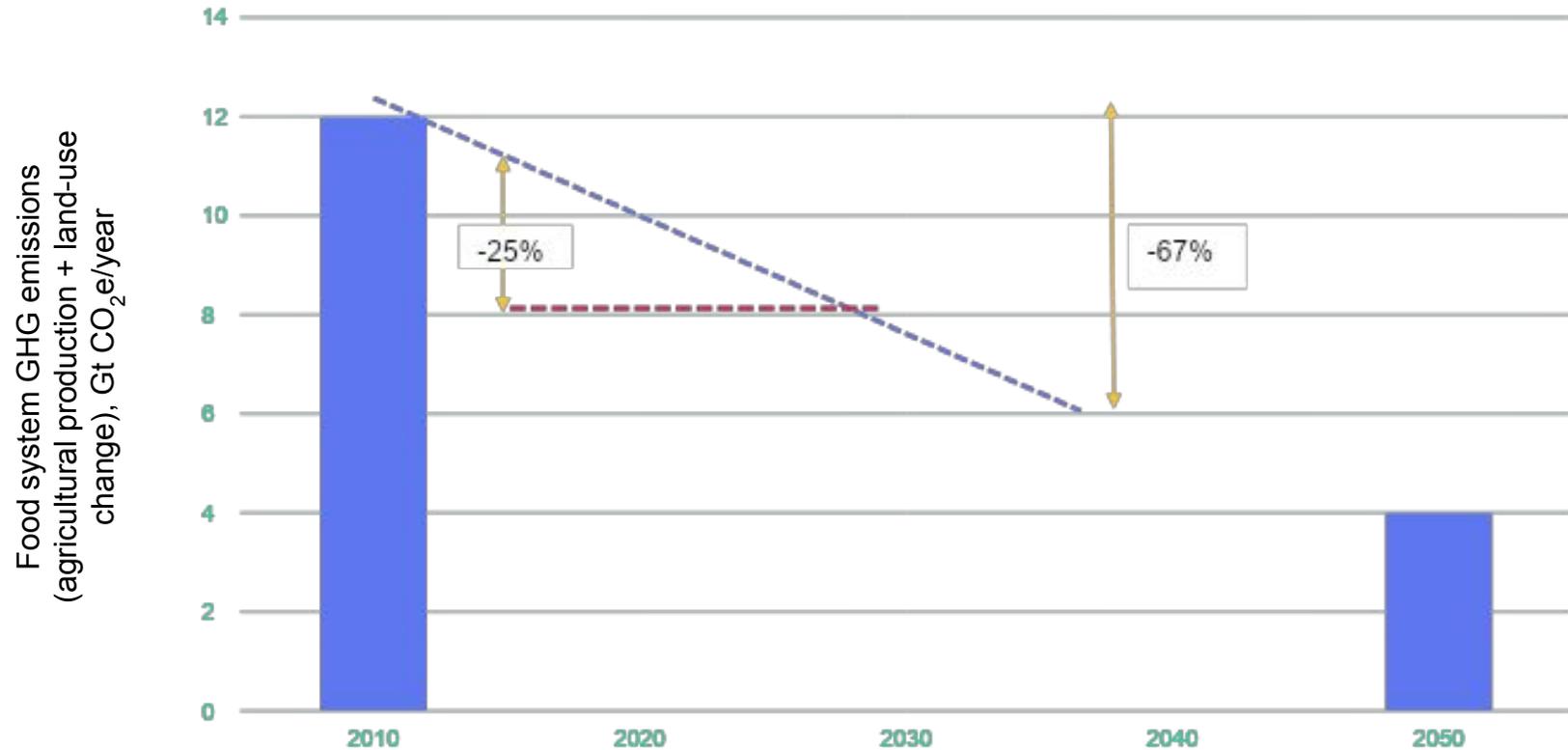
- Coolfood Pledge and Meals
- 70+ organizations in 25 countries
- Serving 8 billion meals each year
- Reduced per-plate GHG emissions by 10%*

*Coolfood Pledge early joiners cohort serving approximately 1.2 billion meals through 2022

Coolfood Pledge: The Target and Progress to Date



Collective target: reduce food-related emissions by 25% by 2030



Sources: Searchinger et al. (2019), Science Based Targets Initiative (2019).

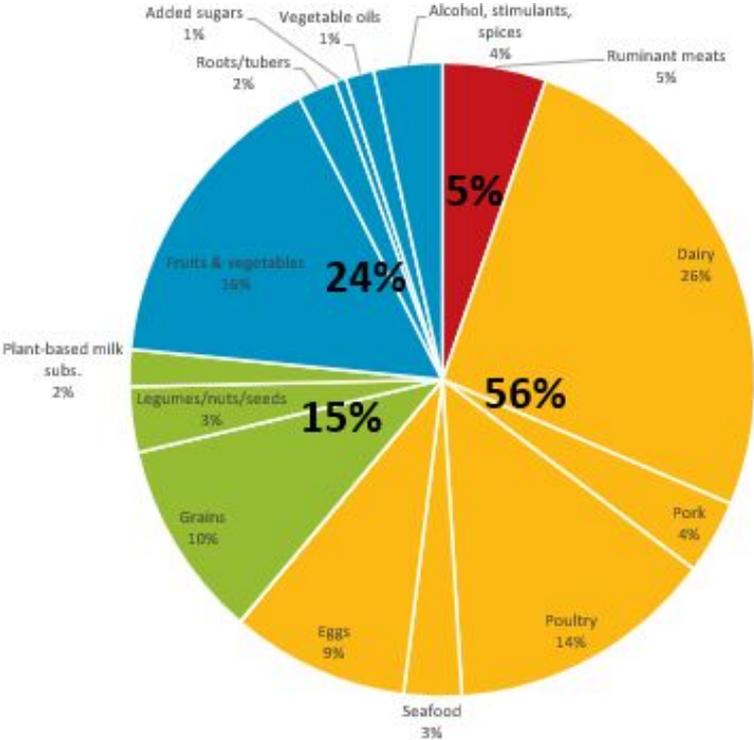
Changes in GHG emissions per plate through 2022

Sector	Number of members submitting data	Change in GHG emissions per 1,000 kilocalories through 2022 (%)
City	5	-24
Company	10	-4
Health care	23	-21
Restaurant	4	-7
University	6	-19
Total	48	-10

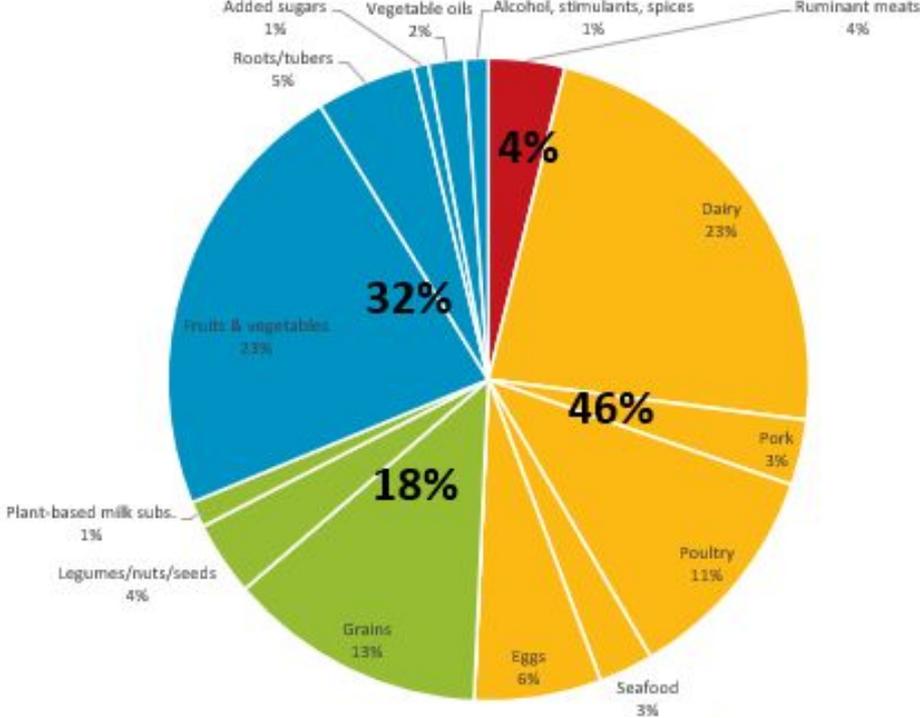
Notes: Trends shown for members who joined Coolfood prior to 2022. Reductions highlighted in green are ahead of the pace needed for 2030, whereas yellow indicates moving in the right direction but not at the right pace; through 2022 a minimum 17.7 percent reduction would be considered on track.

Successes at the sector level: Healthcare

Baseline Food Purchases
(kg boneless weight)



2022 Food Purchases
(kg boneless weight)



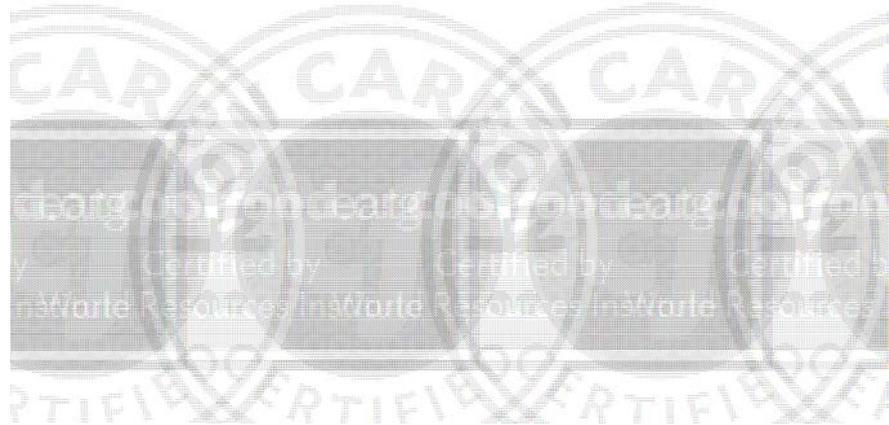


Coolfood Meals

Coolfood Meals

A simple, easy to understand badge displayed on a menu or point of sale to help consumers identify food choices that have a reduced impact on the climate.

Based on the maximum daily recommended carbon budget in line with the Coolfood Pledge 2030 target.



Coolfood Meals Thresholds – US specific

Total daily allowance is 19kg CO₂e

We allocate that allowance across three meals:

- **Breakfast 20%** (3.8 kg CO₂e)
- **Lunch 30%** (5.7 kg CO₂e)
- **Dinner 30%** (5.7 kg CO₂e)

The rest is set aside for snacks and drinks.



Coolfood Meals in the Public Sector



- Aramark has committed to the Pledge, and launched Coolfood Meals in the US and Canada
- Aramark offers Coolfood Meals at 12 Air Force Base food and beverage locations

French Dip Sandwich

 300 Calories

Sliced roast beef served au jus on a fresh hoagie roll spread with horseradish mayonnaise



Roasted Moroccan Veggie Wrap

 530 Calories

Roasted tomato, eggplant, zucchini, peppers and chickpeas with lettuce, provolone and pesto mayo ...



Tuna Sub

 240 Calories

Creamy tuna salad on hoagie roll with lettuce, tomato and vinaigrette



Middle Eastern Beyond® Burger

 430 Calories

Shawarma-seasoned Beyond® Burger with tomato, cucumber, arugula and spicy skhug sauce



Beyond Pledge and Meals: Advice and Guidance



°coolfood

If you want more info about
all our work and resources
www.coolfood.org

Reach out to me at:
clara.cho@wri.org





GREEN FOOD PURCHASING PROGRAM

Alyssa Wooden, Green Food Program Analyst
DC Department of Energy and Environment

★ ★ ★ DEPARTMENT
OF ENERGY &
ENVIRONMENT



GOVERNMENT OF THE
DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

What is the Green Food Purchasing Program?

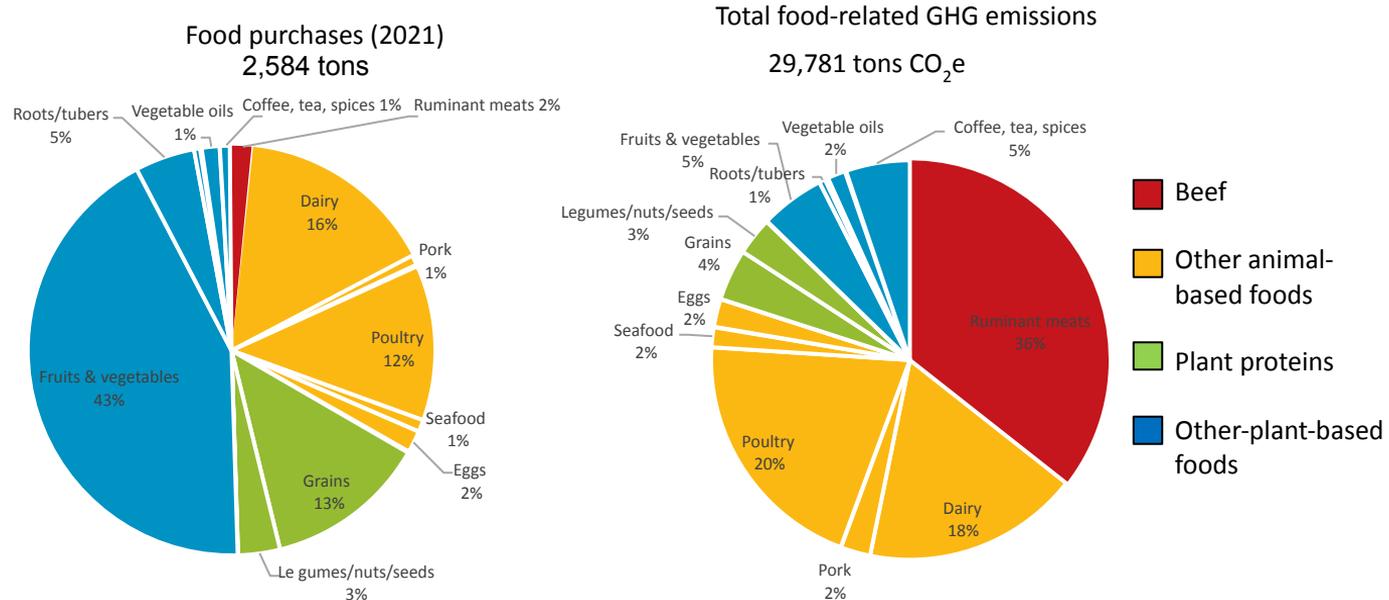
- Requires the District to reduce food-related greenhouse gas emissions
- 7 covered agencies
- Created by the Green Food Purchasing Amendment Act of 2021
 - Establish a baseline assessment of food-related greenhouse gas emissions
 - 2021 as baseline year
 - Track food-related emissions annually
 - Establish best practices to meet emissions reduction targets

GFPAA Emissions Reduction Targets

- Covered agencies must achieve the following food-related GHG emissions reductions in relation to the baseline (2021):
 - By FY25, a 10% reduction;
 - By FY27, an 18% reduction; and
 - By FY30, a 25% reduction.
- Aligns with the World Resources Institute's Coolfood Pledge: reduce food-related emissions by 25% by 2030



Washington D.C.: total food-related GHG emissions (2021 baseline)



Source: Emission factors from Poore and Nemecek (2018) (agricultural supply chain) and Searchinger et al. (2018) (carbon opportunity costs).

Green Food guidelines

- Reduce red and processed meat and increase offerings of plant-based foods
 - No more than 2 servings/week of red meat
 - No more than 1 serving/week per meal type of processed meat
 - All meals must include at least one plant-based option

Green Food guidelines

- Include a clause in food service contracts requiring vendors to report food purchasing data annually to DOEE
 - greenfood@dc.gov
 - Item description, unit weight, quantity

Description	Brand	Unit weight	Pack	Quantity	Net weight
Jumbo Chicken Breast	Sysco	10 LB	4	772	30,880 LBS
Pollock Mini Tenders	Trident	10 LB	1	792	7920 LBS
Biscuit Baked Whole Grai	Pillsbury	2 OZ	120	316	4740 LBS
Mayonnaise Light	Kraft	1 GAL	4	271	1084 GAL
Ketchup Packet	Simply Heinz	9 GM	1000	135	2,700 LBS
Sauce Wing Buffalo	Frank's	5.67 L	2	10	260 LBS
Apples				714	34272 LBS
Milk	Cloverland	Half pint		1200	75 GAL

Food Procurement Contract Language

Food procurement tracking clause (mandatory under the GFPA)

Each quarter, the contractor must submit to DOEE purchasing records that include the weight or volume of each food and beverage item purchased under the contract. These documents must be emailed to [contract administrator email] and to greenfood@dc.gov

Reducing food-related emissions clause

The contractor may serve no more than two servings of red meat (i.e., beef, swine, or lamb) per week.

Each week, the contractor must limit processed meat servings to no more than one per breakfast, one per lunch, and one per supper. Processed meat refers to meat preserved by smoking, curing, salting, or the addition of chemical preservatives and includes ham, bacon, sausages, hot dogs, and deli meats

(<https://www.aicr.org/resources/blog/what-is-processed-meat-anyway/>).

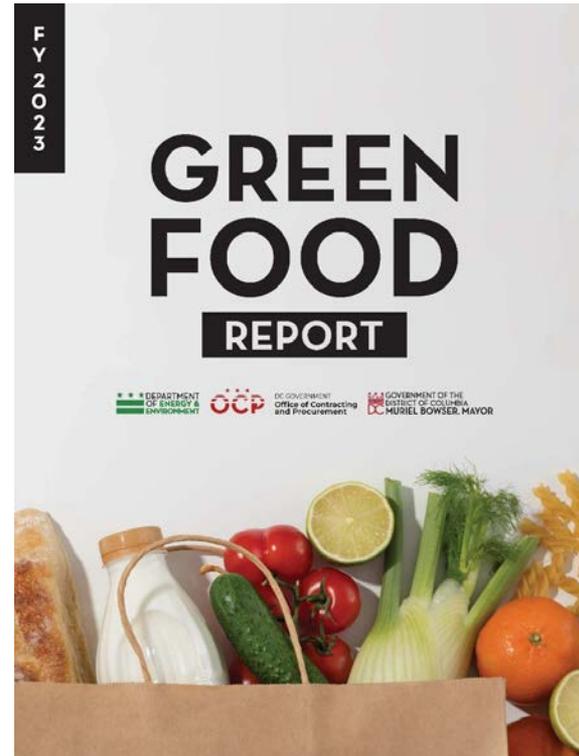
Each meal the contractor serves must include at least one completely plant-based option.

Additional guidance

- GFPAA requires all food and beverage options to be culturally appropriate, responsive to input from the individuals who receive it, and maintain nutritional quality
- Replace meat with fruits, vegetables, legumes and grains rather than soy-based alternatives
- Serve plant-based versions of familiar dishes
- Replace a portion of the meat with vegetables, grains, and or/legumes in dishes you currently serve
- Offer taste tests where individuals can provide feedback on plant-based dishes

Successes

- Baseline emissions assessment
- Development of guidelines
- Partnership with DC Health
- Briefing for agencies and food vendors with WRI
- Publication of first Green Food report



Challenges

- Complex procurement process/regulation landscape
- Acceptability of plant-based offerings



Next steps

- Continue to track food purchasing data and related emissions
- Continue to provide resources to agencies and vendors
 - Greener by Default pilot
- Further limit servings of red and processed meat; increase plant-based requirements
- Consider limiting servings of chicken, dairy, and shellfish

Thank you!

Alyssa Wooden

alyssa.wooden@dc.gov

Green Food report:

https://doee.dc.gov/sites/default/files/dc/sites/doee/service_content/attachments/FY2023%20Green%20Food%20Report.pdf



Better Food
FOUNDATION

Plant-Based Defaults

Laura Lee Cascada
Sr. Director of Campaigns

laura@betterfoodfoundation.org



What Are Plant-Based Defaults?

Serve plant-based with the
option to add meat/dairy

*A recent university study with Sodexo found that plant-based default menus led to a 24% GHG reduction and, when implemented consistently, **nearly tripled** the rate of students selecting a plant-based meal*





Q&A

