




# **Climate Conversations**

## **Plan Great Meals and Waste Less**

St Mark's Creation Care Ministry

May 2023

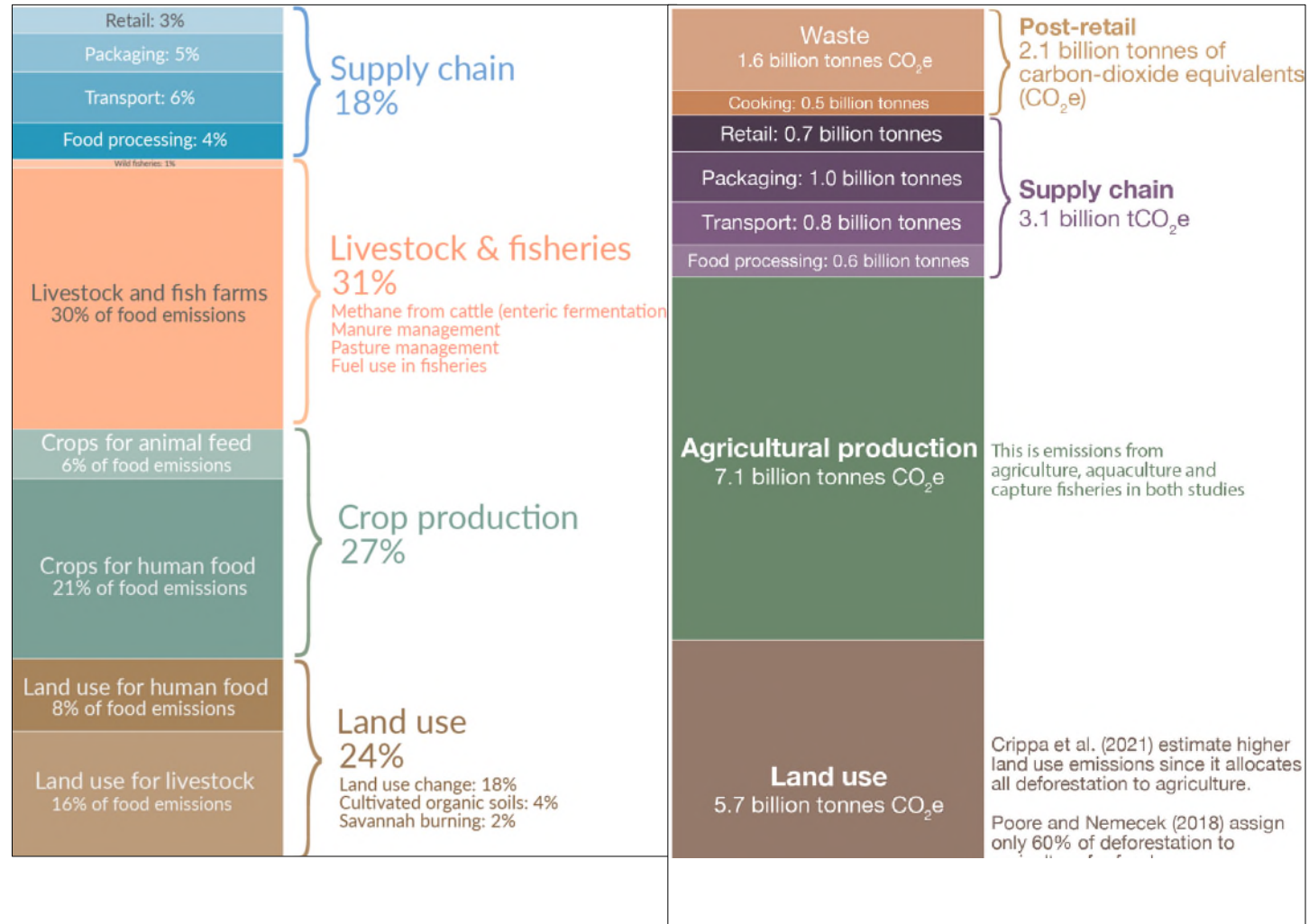


# Agenda

- Land Acknowledgement
- Opening Prayer - Carolyn
- Planning Meals
- Discussion
- Minimizing Waste
- Sharing and Q&A
- Closing Prayer

# A Food Framework

- Our food system causes >25% of global greenhouse gasses
  - Animal agriculture causes 14% of global greenhouse gasses
- Our choices make a difference
  - Planting
  - Food type & land use
  - Transport
  - Packaging
  - Retail
  - Cooking
  - Waste



# What We Eat & Waste has Great Impact

- The top 2 of Project Drawdown's 100 solutions are:

- 1) Reduce food waste
- 2) Plant-rich diets

\* Gigatons CO2 Equivalent Reduced / Sequestered (2020–2050)

SOLUTION	SECTOR(S)	SCENARIO 1*	SCENARIO 2*
Reduced Food Waste	Food, Agriculture, and Land Use / Land Sinks	88.50	102.20
Plant-Rich Diets	Food, Agriculture, and Land Use / Land Sinks	78.33	103.11
Family Planning and Education	Health and Education	68.90	68.90
Refrigerant Management	Industry / Buildings	57.15	57.15
Tropical Forest Restoration	Land Sinks	54.45	85.14
Onshore Wind Turbines	Electricity	46.95	143.56
Alternative Refrigerants	Industry / Buildings	42.73	48.75
Utility-Scale Solar Photovoltaics	Electricity	40.83	111.59
Clean Cooking	Buildings	31.38	76.34
Distributed Solar Photovoltaics	Electricity	26.65	64.86



# Food Affects Climate

- What you eat affects your carbon footprint and carbon emissions tremendously

## The greenhouse gas emissions of different diets

kg of CO<sub>2</sub> per 1,000 calories.

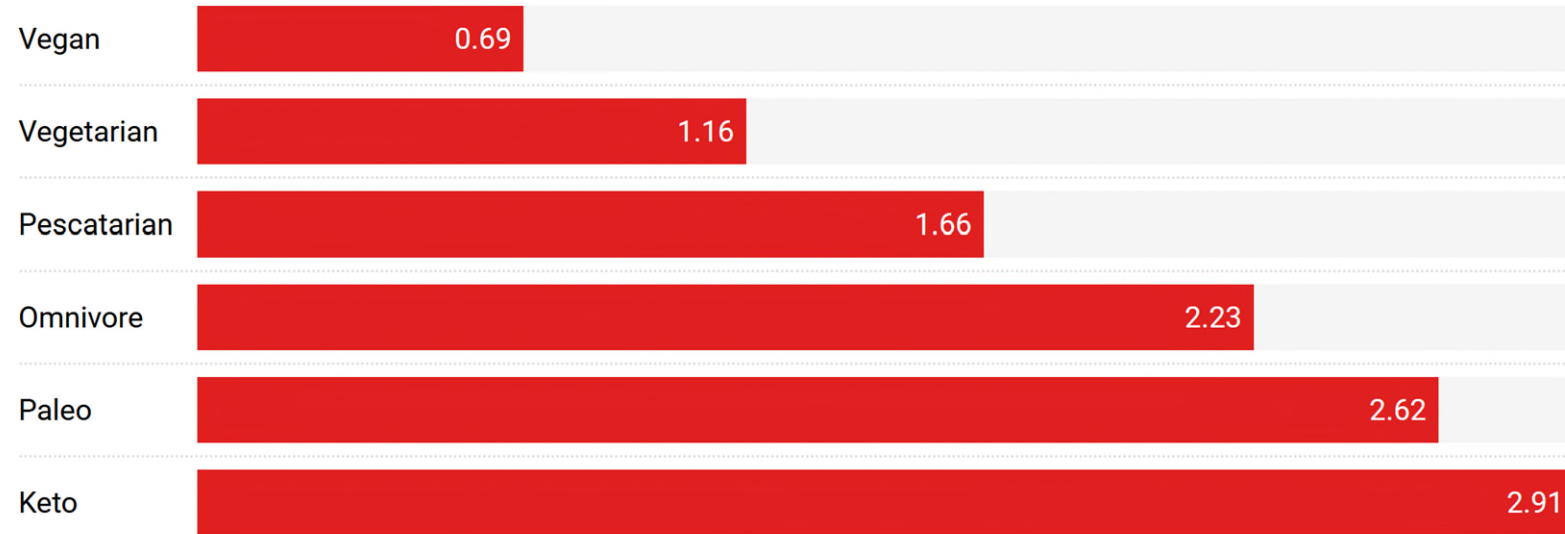
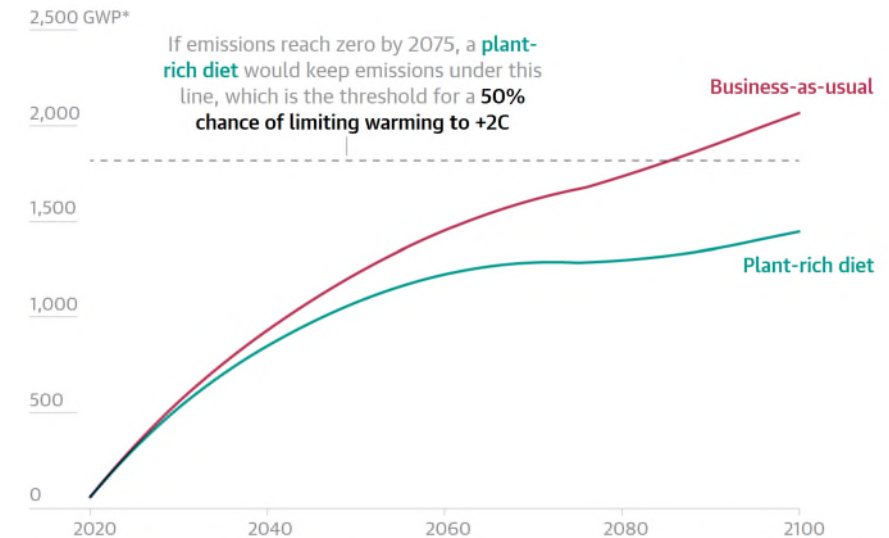


Chart: Elijah Wolfson for TIME • Source: [The American Journal of Clinical Nutrition](#)

TIME

## Adapting plant-rich diets would significantly reduce warming

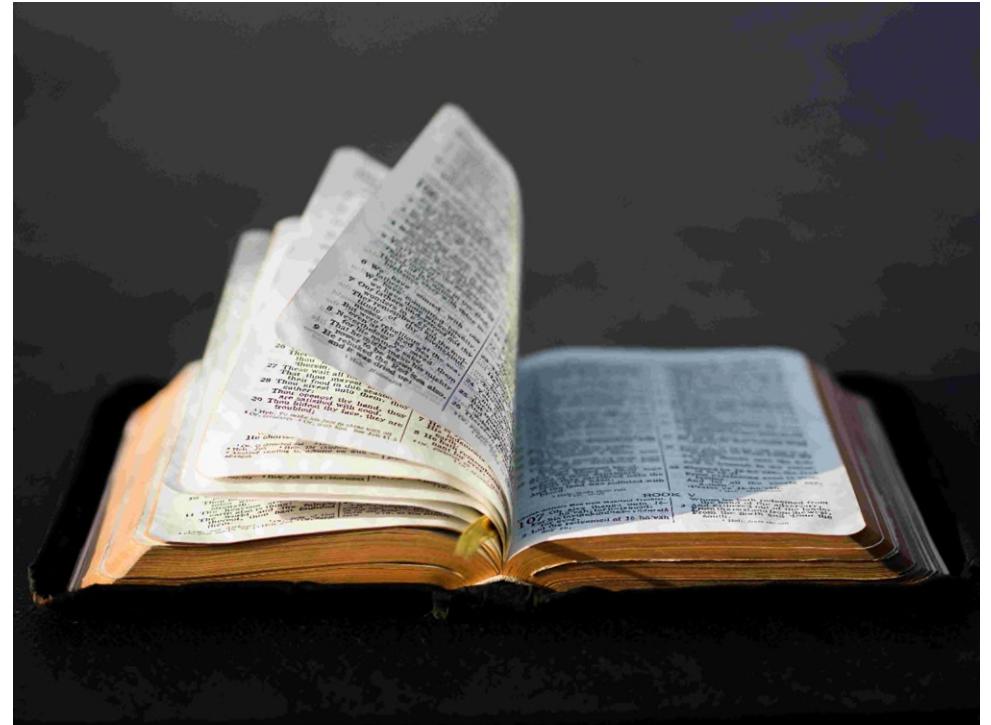
Emissions estimates for a scenario in which all emissions are reduced to zero by 2075



Guardian graphic. Source: Clark et al, 2020, "Global food system emissions could preclude achieving the 1.5C and 2C climate change targets"

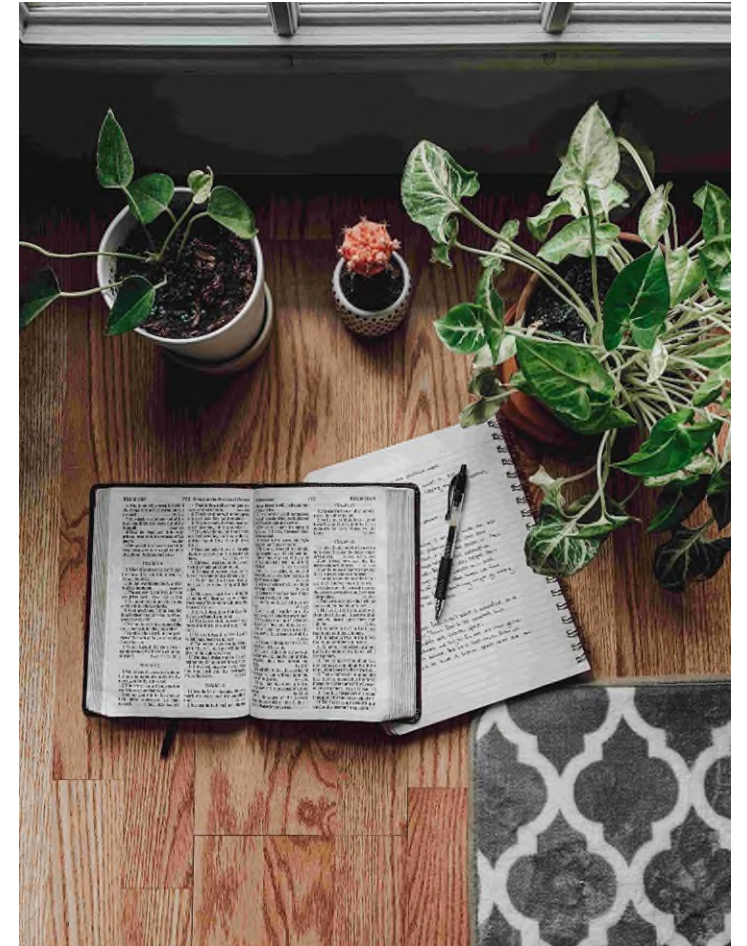
# Food is Provided by God

- Genesis 1: Behold, I have given you every plant yielding seed that is on the face of all the earth, and every tree with seed in its fruit. You shall have them for food.
- Deuteronomy 20: "When you besiege a city ... you shall not destroy its trees. Only the trees that you know are not trees for food you may destroy
- Leviticus 25: Throughout the land that you hold as a possession, you must provide for the redemption of the land



# We must Eat Carefully and Not Waste

- Psalm 145: The eyes of all look to you, and you give them their food in due season. You open your hand; you satisfy the desire of every living thing.
- 1 Corinthians 10:31 - Whether you eat or drink, or whatever you do, do it all for the glory of God
- Proverbs 25:16 - Hast thou found honey? Eat so much as is sufficient for thee
- John 6:12 - When they had all had enough to eat, he said to his disciples, "Gather the pieces that are left over. Let nothing be wasted."





# Plan Purchases

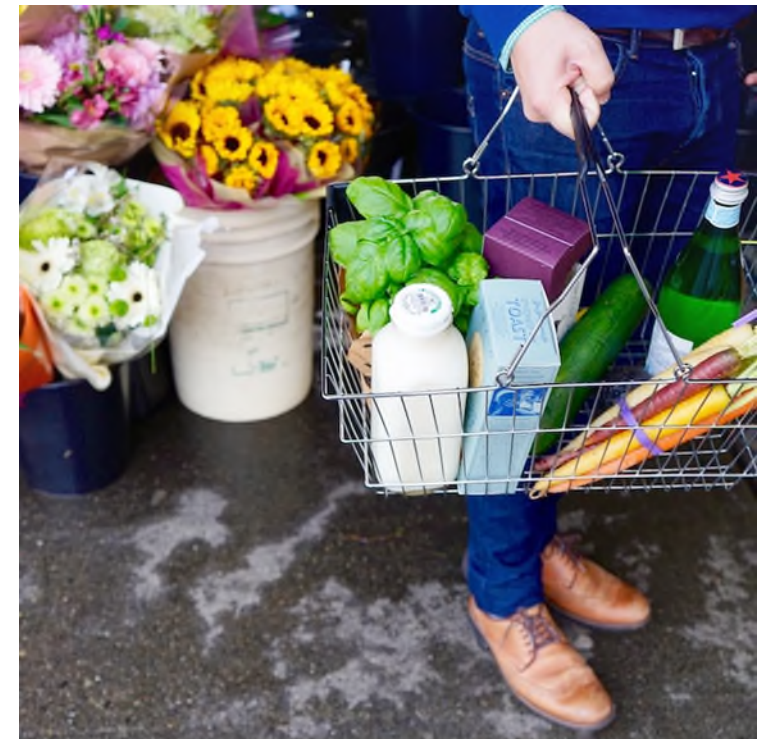
- Consider food types, such as:
  - Legumes, alt-protein or meat
  - Vegetables and fruit
  - Non-processed foods
- “Shop” your cupboards and the fridge first
- Create a shopping list for what you need
  - Only buy items on your list
- Read the labels
- Pick ugly fruit & vegetables so they are not thrown away – they taste the same
- Avoid processed foods





# Shop to Minimize Waste and Save Money

- Avoid pre-chopped pre-prepared foods
- Buy seasonally
  - Consider buying extra and freeze bargain fruits or vegetables
- Choose loose fruit or vegetables to select the amount you really need
- Record meal patterns and buy what you need
  - Reduces waste by 30%
- Buy smaller amounts
- Buy (nutrient-dense) frozen foods



# Reconsider Meat

- 86% of Americans are omnivores
- If one-third gave up meat each day, it would eliminate 340 million passenger vehicle miles-worth of carbon emissions per year
- If one-third gave up meat for a year, it would affect 4.9% of US emissions reduction goals in the Paris climate accord
- Beef has 8-10 times the climate impact of chicken by weight





# Grow your Garden - Outdoors

- Grow your own vegetables
- Back yard garden
  - A multitude of resources
- Plant for various seasons
- For the summer warm season: tomatoes, squash, cucumbers, peppers
- Mid-July for Fall: Carrots, Beets, Broccoli , Cauliflower, Cabbage, Collard Greens, Kale, Peas, Swiss Chard





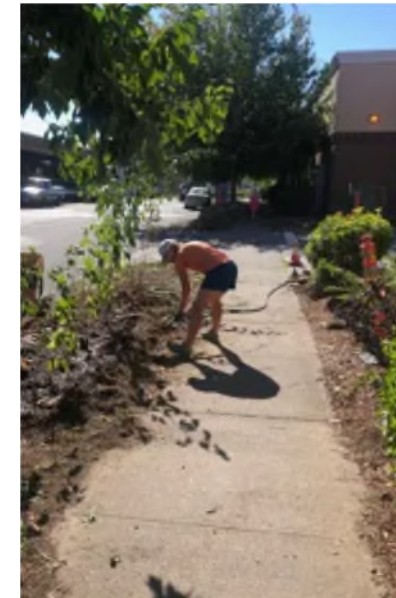
# Grow Your Garden - Indoors

- Herbs that grow well indoors include thyme, mint, rosemary, chives and parsley
- Microgreens need light, soil, a container and seeds
- Hydroponics: Grow vegetables in water, from vegetable scraps, such as:
  - Herbs: One shoot, with leaves
  - Microgreens
  - Celery, lettuce & cabbage with roots
  - Potatoes and yams, to plant outside



# Grow Your Garden – in the Community

- Seattle [P-Patch](#)
  - 33.7 acres in Seattle
- Share a garden in your neighborhood
- Community gardens
  - Crown Hill Community Garden delivered more than 1 ton of food to the Ballard Food Bank





# Buy Local

- Consider the right local foods
  - Transport is 4%-11% of emissions
  - Buying local reduces emissions 4-5%
  - Meatless Monday reduces GHG more than eating local foods every day\*
- Buy local at supermarkets
  - Conventional food distribution creates 5-17 times more CO2 than local food
- Shop at your local farmer's market to minimize transport
- Buy foods in season



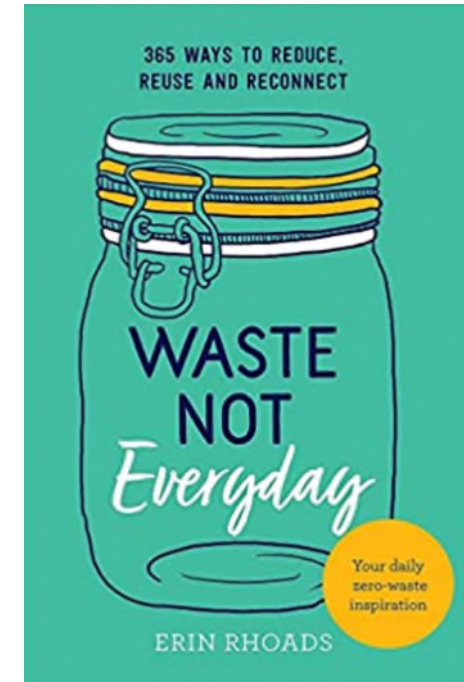
Source: Ballard Farmers Market

\*Source: <https://news.climate.columbia.edu/2012/09/04/how-green-is-local-food/>



# Interesting Ideas

- Don't get a receipt – they have BPA, a chemical used to make plastic
- Preserve foods via canning and jam
- Save tomato, pumpkin and squash seeds to grow your vegetables
- Shop in bulk food stores and bring your own containers
- Use recipes to make prepackaged foods like sauces and dips



# Discussion & Breakout Session

Questions:

- What are your suggestions for buying local and choosing the right foods?
- What advice do you have for gardeners?
- What tips do you have on storing food?



# Store Food so it Keeps Longer

- Use glass containers to store spices, grains, and staples to see when you run low
- Produce like root vegetables, potatoes and apples last longer in cool, dark places
- Manage temperature: Some foods should not be refrigerated while others can be
- Fruits and vegetables don't play well together - Many fruits produce ethylene
- Vegetables need to breathe - Poke holes in plastic bags or use reusable mesh bags
- Don't clean produce until you're ready to use it - dampness encourages bacteria





# Minimize Waste

- Use scraps
  - Vegetable peels like zucchini, carrots or corncobs for the vegetable stock
  - Use leftover [citrus peel scraps to season stews and tomato sauces](#)
- Collect water used to rinse or steam veggies for use in watering plants, with vitamin-augmented water



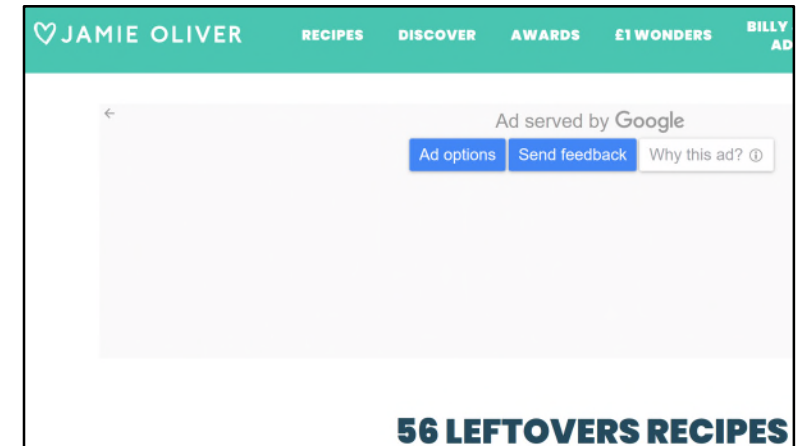
# Understand How Long Food Lasts

- Date labels are “best if used by,” “sell by,” or “expires on” & a specific date
- Date labels refer to quality, *not* safety. “Use by” may indicate when to discard a product for food safety and “best if used by” is quality
- Use your best judgment – if a product looks good, smells good and tastes good, it’s probably okay to consume
- Vox: Most packaged foods are fine for weeks or months past the date. Canned and frozen goods last years.



# Eat Leftovers

- As you plan what you'll be eating for the week, plan a day to "eat down" the leftovers and excess food in your fridge
- Use recipes for leftovers
- Freeze leftovers
- Soak wilted vegetables in a bowl of ice water to crisp them up
- Stir-fry Fridays





# Use Waste Creatively

- Eggshells: Potassium and calcium. Wash, crush, sprinkle around plants; repels slugs & snails too.
- Banana skins: Potassium. Cut up and put in the soil.
- Used/spent coffee grounds - Adds acidity. Sprinkle on the soil for some plants.
  - Clean pots too - Sprinkle grounds on the surface of pots and pans, scrub with a sponge and rinse
- As with all fertilisers, little and often is best



# Compost for the Garden

- Select the right food scraps
- Store them in a container
- Choose a location
  - Back yards
  - Composting devices
- Use compost to grow better vegetables



Source: <https://www.npr.org/2020/04/07/828918397/how-to-compost-at-home>



# Sharing, Discussion and Q&A

## Questions

- How do you use food scraps or leftovers?
- What actions do you take to reduce food waste?
- What else might you do to reduce food waste?





# Make a Difference

*“Throwing away food is like stealing from the table of those who are poor and hungry” – Pope Francis*

# Closing Prayer

## *Prayer*

Dear Lord, give us the patience, grace and reverence to stop wasting so much food. Help us to buy what we need, and savor all our food as we consume it. May we be always grateful for the blessings of strength and flourishing that come from our food. And may we recommit ourselves to finding ways to get food to those who are hungry. Amen

St Peter's Church, Gildersome, Leeds, UK

