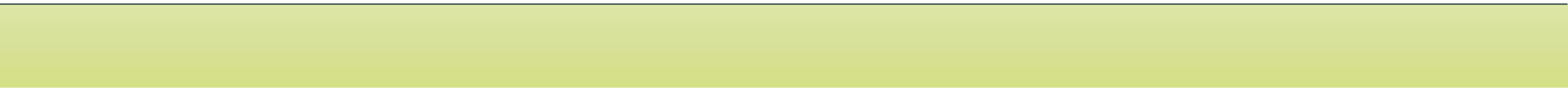




Climate Conversations Eat Pizza for the Planet – Meals to Reduce Climate Change

St Mark's Creation Care Ministry

November 2024



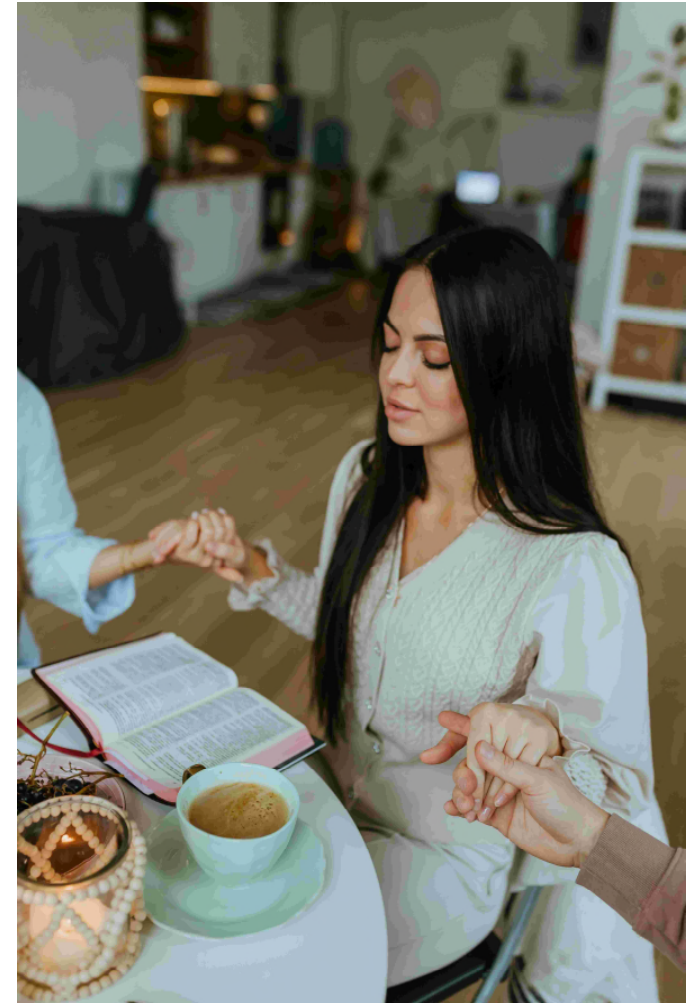


Agenda

- **Land Acknowledgement:** Saint Mark's Cathedral acknowledges that we gather on the traditional land of the first people of Seattle, the Duwamish People, who are still here, and we honor with gratitude the land itself and the life of all the Coast Salish tribes.
- Opening Prayer
- Framework
- Discussion
- Actions
- Sharing and Q&A
- Closing Prayer

Opening Prayer

God of justice,
we pray for our local community.
Bless our local markets, food stores, cafes
and restaurants.
Bless us at the tables we share with family
and friends, and make us good
companions at mealtimes and beyond.
Increase in us the spirit of hospitality to
strangers.
Teach us to live and to eat more simply, so
that there may be more to share with the
hungry of our neighbourhood.
Amen



Pizza and Climate Change

- Ingredients are a key cause of environmental impacts of pizzas – and other foods
- Pizzas environmental impacts are mainly driven by their cheese and beef
- Emissions impacts vary
 - Marinara pizza: 1.7 kg CO_{2e}/kg
 - Margherita pizza topped with mozzarella cheese: twice that figure.
 - Adding buffalo mozzarella increases its carbon footprint to 4.2 kg CO_{2e}/kg.
 - Pepperoni adds more.
- Meat toppings & cheese are less sustainable



Food has a Big Impact on Climate

- From farm to fork to landfill, the US food system causes about 30%+ of US GHG emissions
 - Impacts come from fertilizer, cutting forests, methane, burning crop residue, fuel, refrigeration, transport, packaging, cooking and more
 - Meat causes about 60%
 - Dairy production causes about 22%
- Food waste fills about 25% of landfills



Scripture has Insights on Food

- Genesis 1: God said, 'I give you every seed-bearing plant on the face of the whole earth and every tree that has fruit with seed in it. They will be yours for food'
- Ecclesiastes 9: Eat your food with gladness, and drink your wine with a joyful heart, for God has already approved what you do
- Proverbs 23: Do not join those who drink too much wine or gorge themselves on meat, for drunkards and gluttons become poor
- Proverbs 25: It is not good to eat too much honey
- 1 Corinthians 10:31 - Whether you eat or drink, or whatever you do, do it all for the glory of God
- 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."





A Framework for Our Food Choices

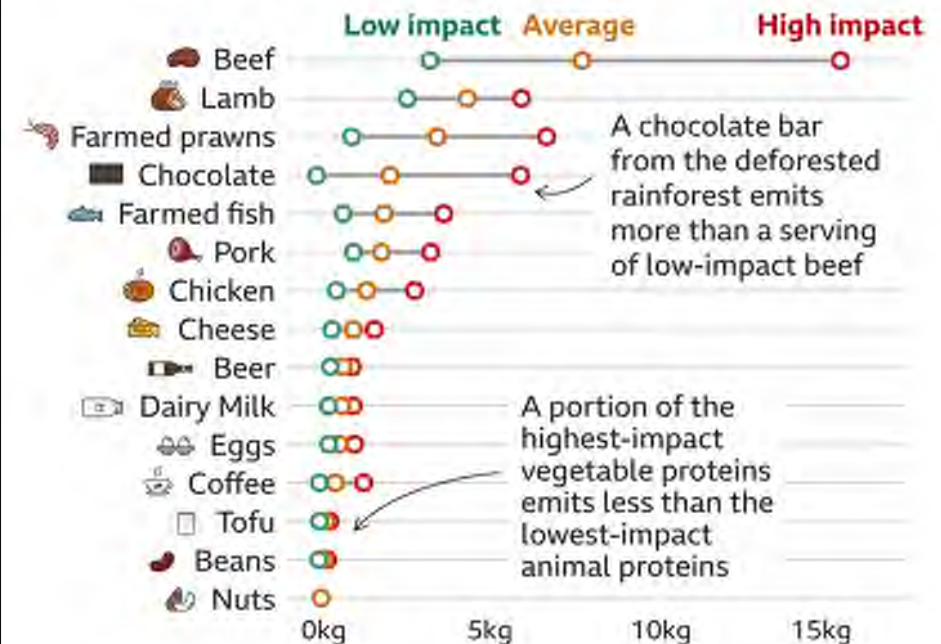
- Better choices affect money, health and climate
- What to eat
- Make, takeout or dine out
- Shopping for food
 - Where to shop
 - Ingredients
 - Packaging
- Cooking
- Eating meals
- Storing food
- Disposing of food or ingredients

What to Eat

- To have less climate impact, eat:
 - Lots of wholegrains, fruit and vegetables, and less sugar, oils, fats and meat (WWF)
 - Less processed foods
 - Emissions and nutrition
 - Plant-rich meals with less meat
 - Beef production requires 20x more land and emits 20x more GHG than beans per gram of protein
- To save money, purchase food in bulk, focus on plant-based food, and consider frozen fruits and vegetables

Beef has the biggest carbon footprint – but the same food can have a range of impacts

Kilograms of greenhouse gas emissions per serving



Note: The figures for each food are based on calculations from 119 countries. Serving sizes are from the British Dietetic Association (BDA) and Bupa.

Source: Poore & Nemecek (2018), Science

BBC

Make, Take or Eat in a Restaurant

- Home: Eating at home has lower GHG emissions
 - Food away from home (restaurants) is 330% higher in cost, 60% higher in GHGE, and 70% higher in energy content than meals at home
- Delivery: Higher GHG due to single-location delivery
- Restaurant: Can reduce climate impact with:
 - Local and in-season ingredients
 - Simpler menu
 - Apps or Green Restaurant status



Shopping – Where to Shop

- E-commerce grocery delivery can be better than a traditional trip to the store
 - Orders are often clustered
- GHG for ingredients purchased at a grocery store are 33% higher than a prepackaged meal kit
 - 8.1 kg CO₂e/meal for a grocery store meal or 6.1 kg CO₂e/meal kit
- For shopping at supermarkets, cutting shopping frequency in half reduces GHG emissions by 44%, while combining trips and errands cuts emissions by about 50%



Shopping - Ingredients

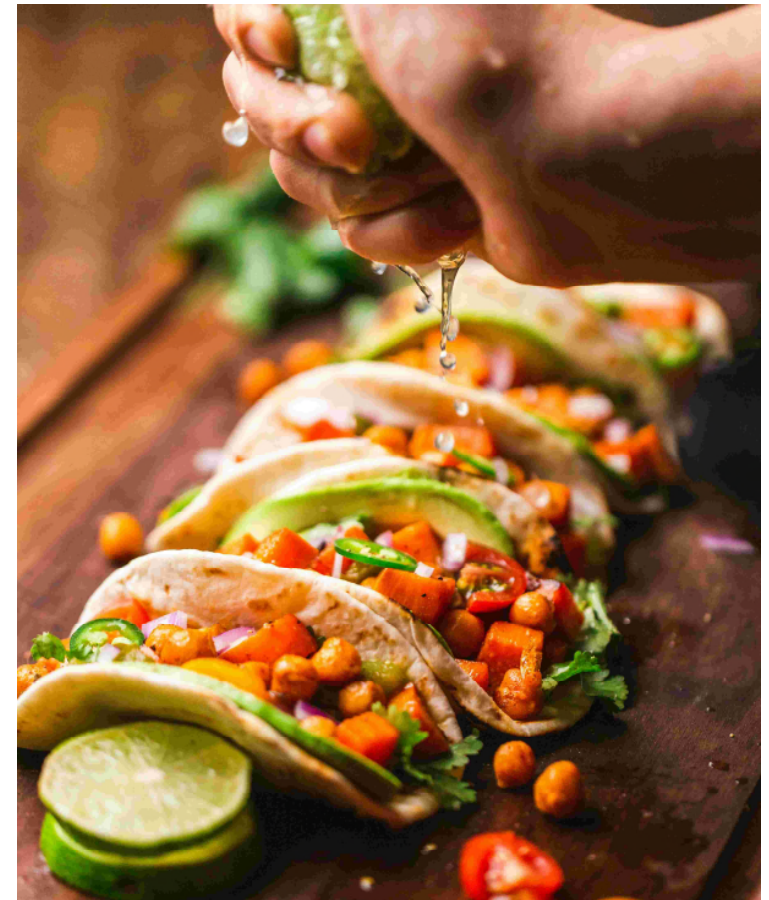
- Eating local, seasonal food promotes environmental sustainability and stronger connections to local food systems
- Eat unprocessed or less processed foods, as highly processed foods have higher carbon emissions due to production, processing & transport
- Scan ingredients with Open Food Facts, EWG or other apps to find climate impacts
- Look for certification such as USDA Organic, Marine Stewardship Council, Rainforest Alliance, Regenerative Organic Certified, or Fair Trade



Open Food Facts: <https://world.openfoodfacts.org/eco-score-the-environmental-impact-of-food-products>
EWG: <https://www.ewg.org/apps/>

Make Simple Substitutions

- Simple substitutions decrease carbon emissions and improve dietary quality
 - Chicken instead of beef in tacos
 - Cod instead of shrimp
 - Plant-based instead of dairy milk
- The largest benefits are substitutions for protein foods and mixed dishes
 - Mixed-dish substitutions such as beef to poultry or plant-based in a taco is helpful



Source: <https://www.msnbc.com/opinion/msnbc-opinion/climate-change-lifestyle-choices-beef-carpool-rcna124449>
<https://www.nature.com/articles/s43016-023-00864-0.epdf?>

Shopping - Packaging

- Avoid individual servings and packaging
- Buy fruits and vegetables without plastic
 - Buy loose fruits & vegetables
 - Use your own bags
 - Reusable produce bags
- Reduce plastic use with reusable bags, containers, eco-friendly packaging options such as beeswax wraps or glass jars, or buying groceries in bulk
- Look for paper or cardboard packages



Discussion & Breakout Session

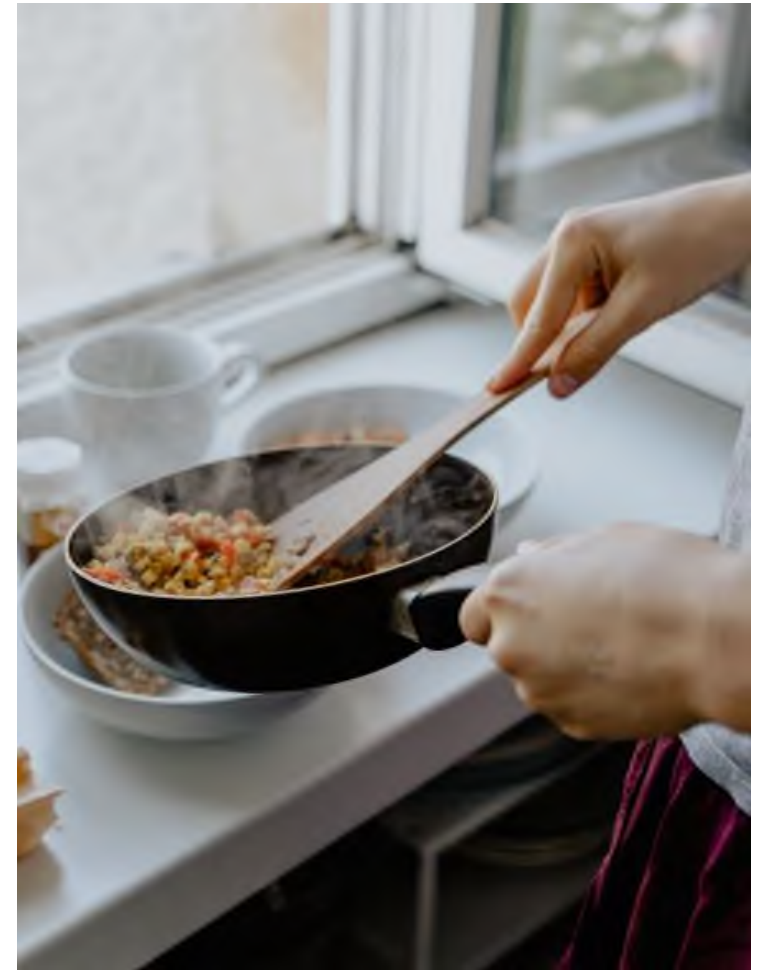
Questions:

- Can you change where you shop, and if so, how?
- What changes might you make in the foods or ingredients you buy?
- How can you reduce packaging and container waste?



Cooking

- Home cooking impacts vary from 6% to 61% of a person's GHG emissions
- Choose foods & ingredients that cook quickly
- Use low-power appliances
 - Microwave uses the least energy, roasting the most
 - Induction appliances
- Use the right size pans and pots, with lids
- Reduce the amount of meat in your meals
 - Use meat for flavor or in smaller portions rather than as the main item
- Use all vegetable & meat parts for stock



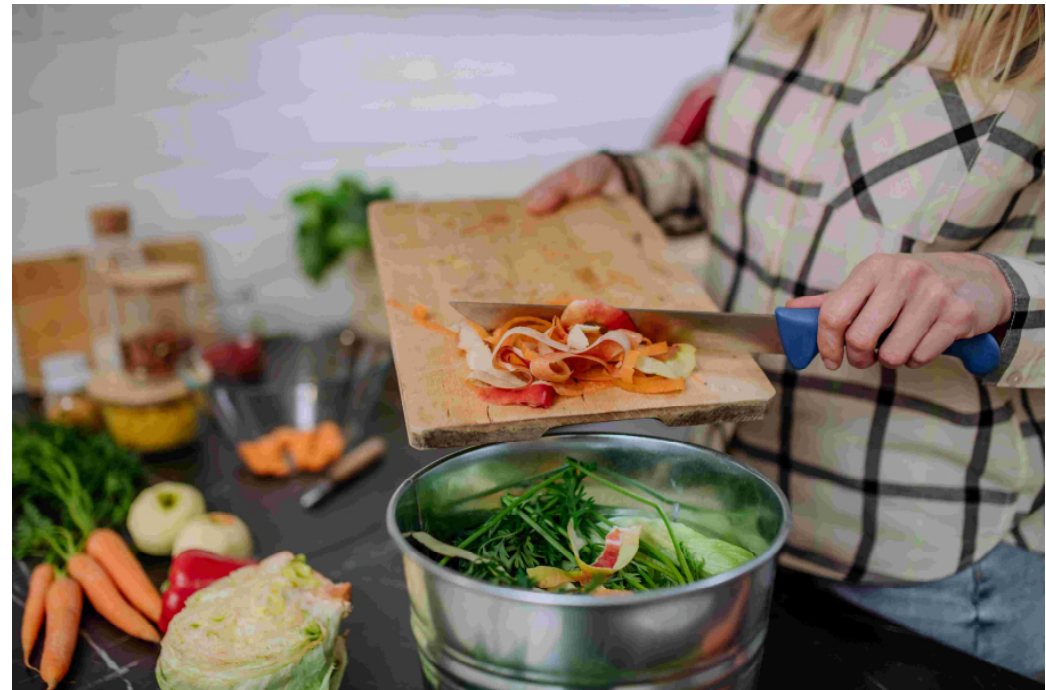
Eat Intentionally

- Mindful eating to eat more sustainably
 - Eat slowly & concentrate on your food, where it's from and how it nourishes you
- Prayer reminds us to be thankful and brings God to the front of our minds
- Prayer reminds us that food fuels our body so we live the purpose God creates



Use the Extras

- Start by reducing food waste with meal planning, proper food storage, getting creative with leftovers
- Repurpose leftovers
 - Potato for breakfast burritos, pumpkins for bread/muffins
 - Donate nonperishables to food banks
- Use vegetable peels like zucchini or carrots for vegetable stock and citrus for stews or sauces
- Store or freeze leftovers
- Consider apps like Too Good To Go



Store Food Well

- Set the fridge at 37° and the freezer at 32° Fahrenheit, fill it $\frac{3}{4}$ full
- Date labels such as “best if used by,” “sell by” or “expires on” refer to quality, *not* safety. Use judgment.
- Veggies that wilt go in a high humidity drawer, fruits and veggies that rot in low humidity drawer, and store meat, poultry and fish in lower shelves, the coldest
Place grains in airtight containers
- Freeze, pickle, dehydrate, can or make jam/jelly from surplus fruits and veggies

<https://www.epa.gov/recycle/preventing-wasted-food-home#frig>



Disposing of Food Extras or Waste

- Food waste causes about 8% of GHGs
- Donate extra food to food banks
- Use waste creatively for fertilizing plants or cleaning pots
- Composting food scraps instead of sending them to a landfill can reduce emissions by more than 50%

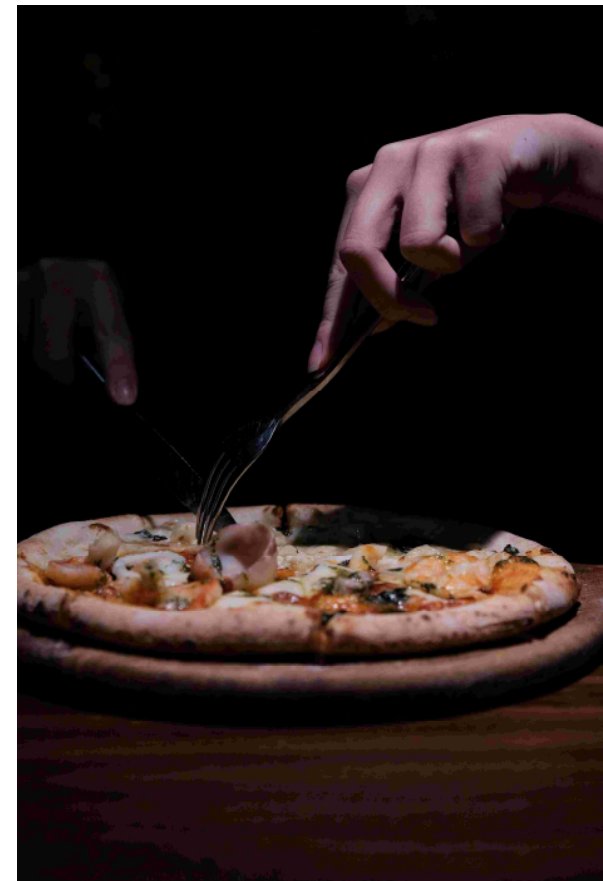


Sustainable Pizza

- For a traditional salami pizza, 49% of GHG come from cheese, 29% salami, 9% flour, 8% tomato paste & 4% oil

To increase sustainability:

- Use whole grains
- Use locally sourced ingredients
- Select ingredients with less packaging
- Use plant proteins, less cheese, more vegetables, and less or no meat
 - Use leftovers from previous meals for toppings
- Ensure energy efficient baking
- Avoid waste



Sharing, Discussion and Q&A

Questions

- How might you cook differently?
- Are there ways you can store food differently, before or after meals?
- How will you compost?



Make a Difference

My dream is to inspire and educate the younger generation to eat and consume more consciously. And a pizzeria is the perfect place to do that because I feed hundreds of people each evening, many of them young customers. – Dennis Lovatel, owner, Pizzeria da Ezio, Alano di Piave, foothills of the Dolomites

Closing Prayer

Bread of Life, give us the patience, grace and reverence to stop wasting so much food.

Help us to buy less, eat modest portions at meals, 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



