

Go Lean & Green for a Healthy Environment and Wellness

M-DCPS Department of Food and Nutrition
June 2019





Department of Food and Nutrition

Lean & Green Sustainability Initiatives

- To support a safe and healthy learning environment
- To reduce food waste
- To use less resources
- To build sustainable practices in cafeterias

Why We Care About the Environment

The Environment provides...

- Clean air to breath
- Clean water to drink
- Clean food to eat

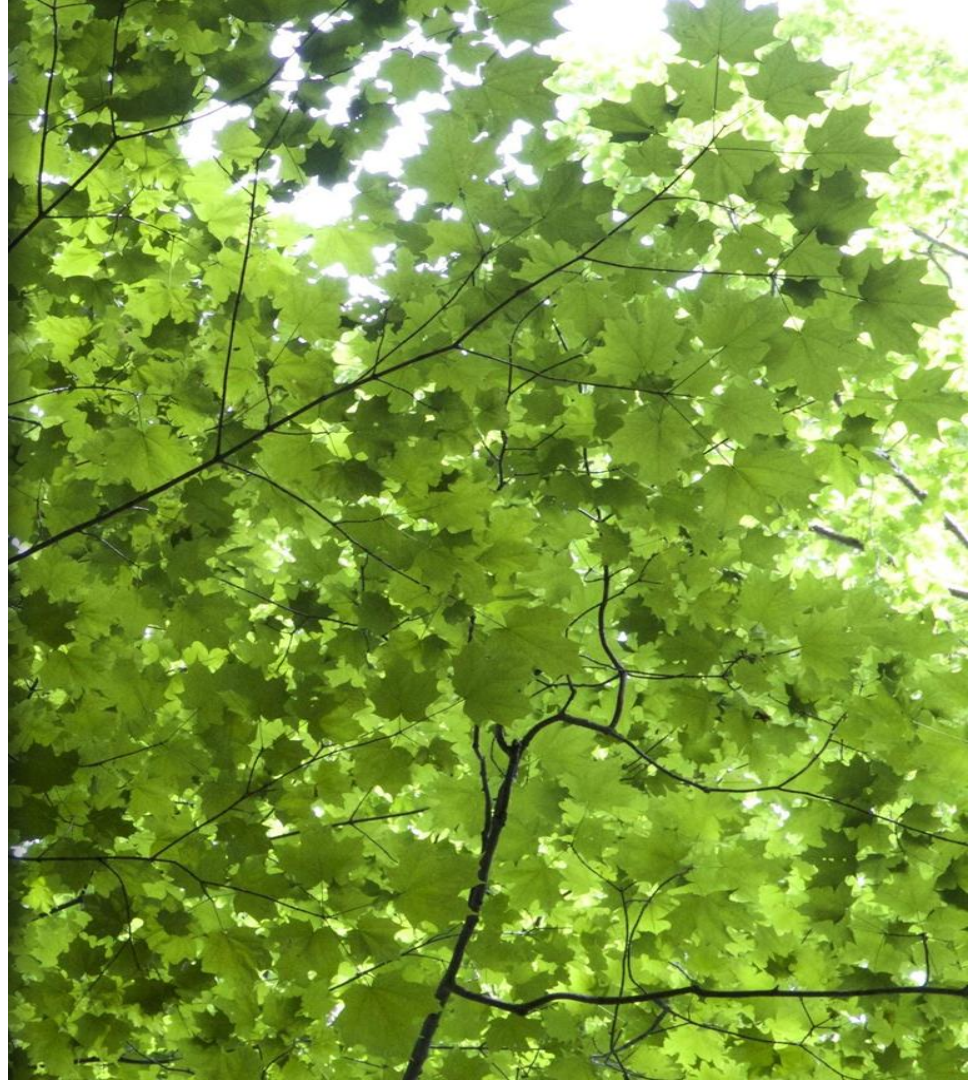
ALL children deserve a healthy environment to learn and grow. This is the core idea of

Sustainability.

Examples:

1. Eating *fresh food* from the garden
2. Going fishing in *clean waters*.
3. Playing outdoors to *connect with nature*

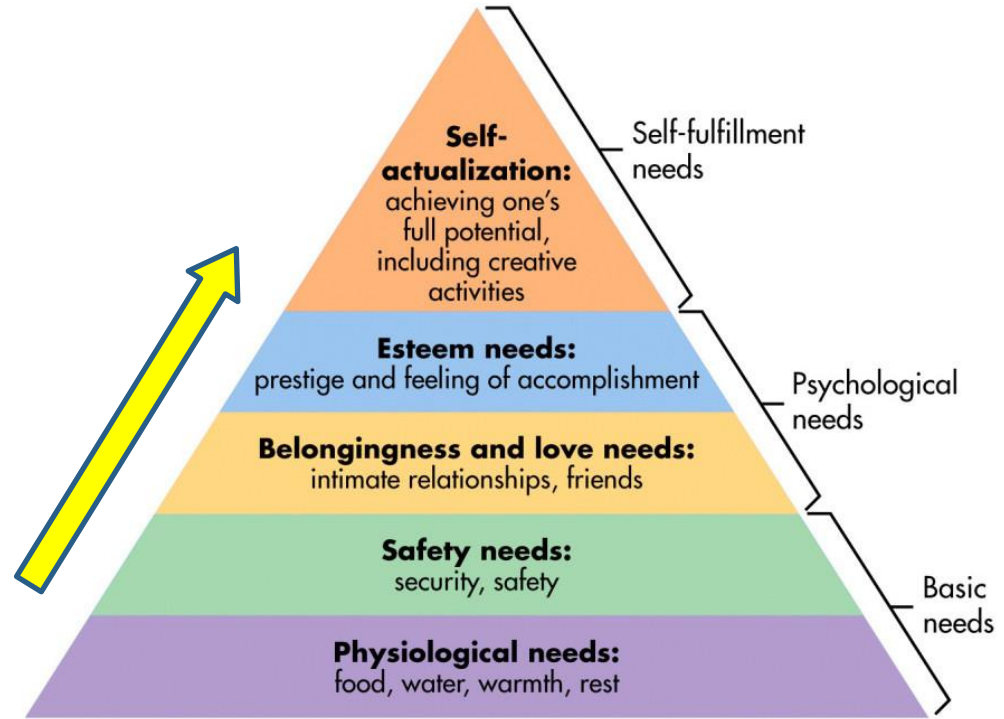
The Earth is beautiful and we should keep it that way.



Why We Care About the Environment

The environment provides us with our basic needs.

We need to satisfy the needs at the bottom of the pyramid before we can reach the top ~ our full potential!



Maslow's Hierarchy of Needs

M-DCPS Goal of a Safe and Healthy Learning Environment

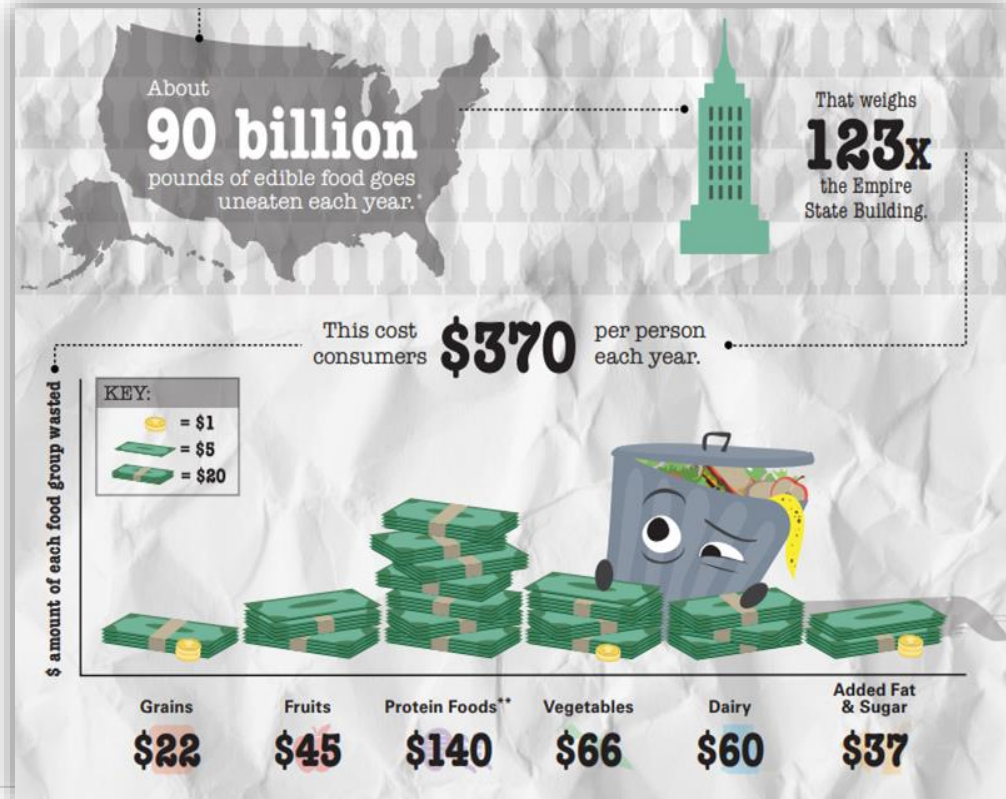
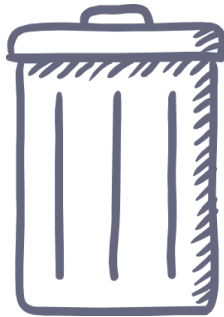


Coral Park Elementary

Department of Food and Nutrition

Reducing Food Waste

Most of this ends up in landfill, which has created an environmental crisis because landfills are reaching their capacity.



Importance of Reducing Food Waste



1. Controls Cost

- Lowers costs for restaurants, farmers and processors
- Lowers grocery bills in your household



2. **Improve our environment:** Reduces the amount of resources needed for growing, processing and distributing food, and sending it to the landfill.



3. Sustainable resources for the future

USDA School Meal Programs

Offer versus Serve to Reduce Food Waste

- Students are offered menu choices and are able to choose a *minimum* of 3 items to be served.
- Students are encouraged to choose healthy, nutritious meals that they *intend to eat*, so less food is thrown away.



Offer versus Serve to Reduce Food Waste

Offer versus Serve – Breakfast

Students must select a minimum of three (3) food items for a reimbursable breakfast.

Additional food items may be purchased at a la carte prices.

Offer versus Serve – Lunch

The National School Lunch Act permits students a minimum of three (3) and a maximum of five (5) offered components, of the reimbursable lunch. Additional components or other items may be purchased at a la carte prices.



Offer versus Serve to Reduce Food Waste

Offer versus Serve – Lunch

Students are to have available unit-priced lunches, which may include milk and 100% fruit juices. The reimbursable lunch must meet the nutritional requirements set forth by law and regulations of federal and state governments. Schools provide lunches in accordance the menu published by the Department of Food and Nutrition.

Additional information can be found in Food
[Service Procedure B-1: Child Nutrition Program.](#)



The Plastic Problem...

It just won't go away.

- It can take *over 1,000 years* for plastics to decompose.
- Drink companies alone produce over *500 billion* single-use plastic bottles annually.
- Up to *12.7 million tons* of plastic enters the ocean every year.

Facts from **GREENPEACE**



Sustainability

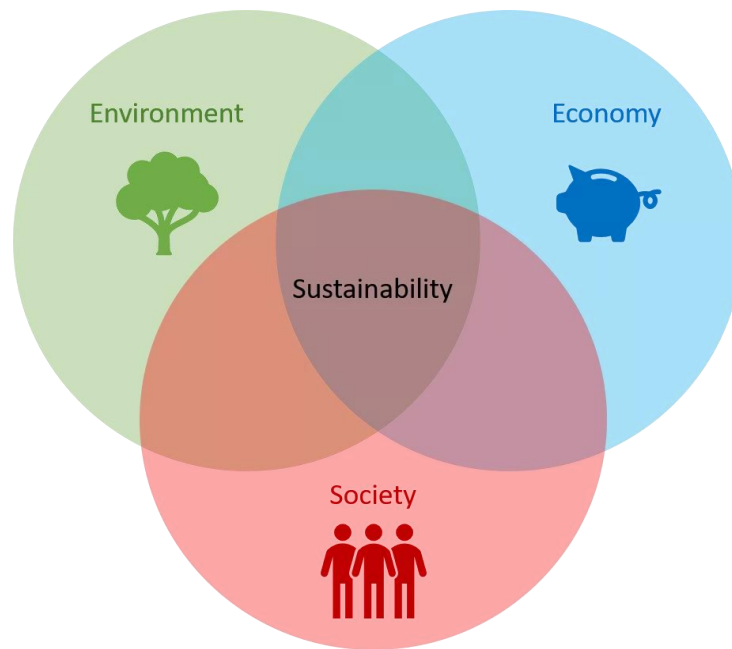
“to create and maintain the conditions under which humans and nature can exist in productive harmony to support present and future generations,” according to EPA.

Sustainable World

Sustainable Job

Sustainable Food

Sustainable YOU



Balancing **environment**, **society** and **economy** creates *harmony* and *sustainability*.



Sustainable Practices in Cafeterias



Sustainable Practices in the Cafeteria

- Compostable Plate to eliminate Styrofoam
 - Eliminating Plastic Straws to reduce plastic use
 - Offer versus Serve to reduce food waste
 - Farm-to-School to support local farmers
 - Garden-to-Cafeteria to integrate harvest in the school menu
-

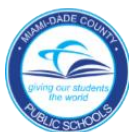


Staff Development to Control Costs using Less Resources

- Trainings adhere to federal Child Nutrition Program guidelines including Offer versus Serve, which require that students are offered a prescribed meal component and not required to take items.
- Trainings discuss HACCP procedures to reduce food waste due to biological, chemical and physical hazards.
- Trainings provide updated procedures for effective menu planning, inventory control, and food management.
- Awareness campaigns and trainings to reduce food waste.



M-DCPS uses a Compostable Meal Tray



Eliminating Styrofoam

- Made from harmful chemicals
- Thrown away in landfills and can take over 1000 years to disintegrate
- Styrofoam breaks up into little pieces
- The little pieces pollute the environment and can harm wildlife if consumed





Thousands of students eat
school lunch in M-DCPS
everyday, how much
Styrofoam are we
preventing from entering
our environment?



Department of Food and Nutrition Eliminating Plastic Straws

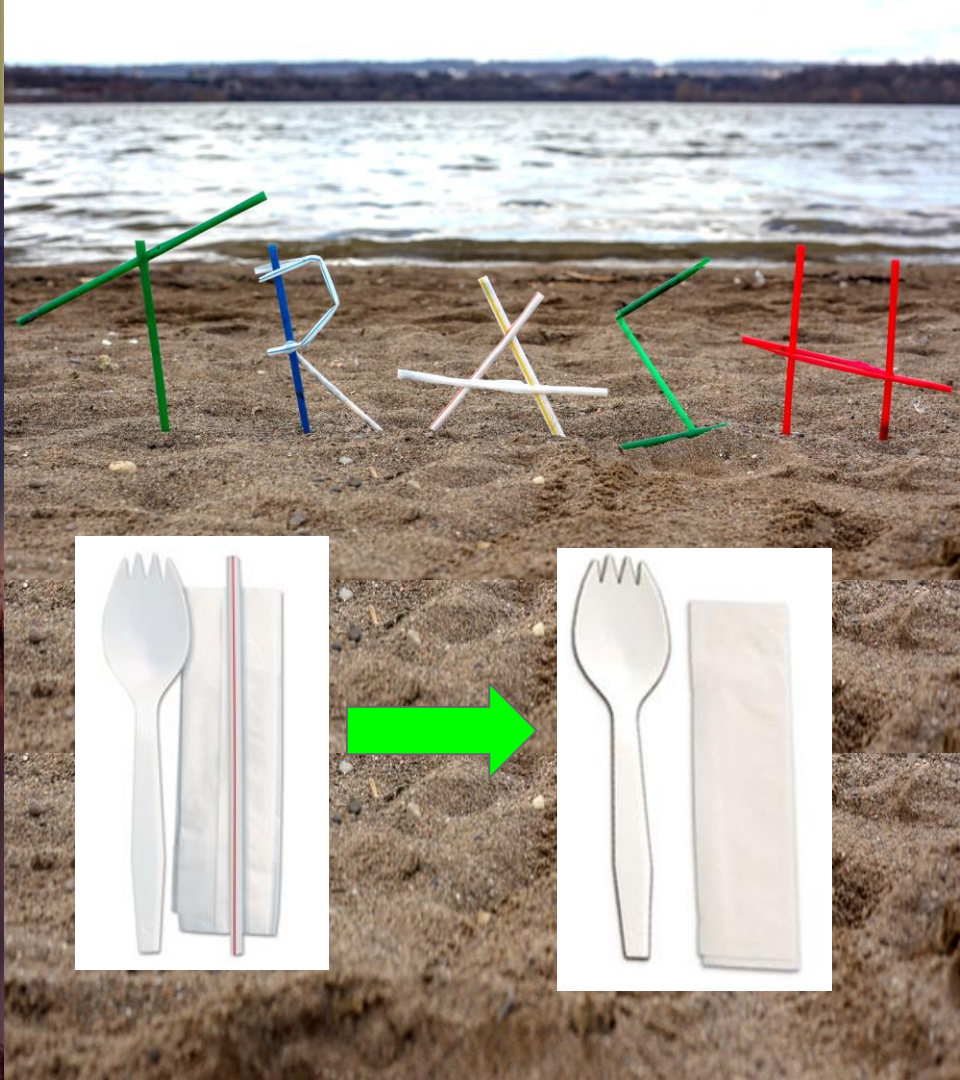
Why?

Plastic Straws are a major contributor to environmental and ocean pollution



Over *500 million* straws are used everyday in the United States

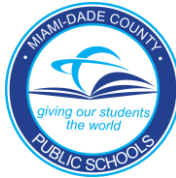
Coming to your school soon...



Department of Food and Nutrition

Farm-to-School

- Since 2009, Florida-grown fruits and vegetables have been incorporated into M-DCPS meals for breakfast, lunch and afterschool programs





M-DCPS Garden-to-Cafeteria Program



Laura C. Saunders Elementary



Holmes Elementary



South Miami K-8 Center



North Miami Elementary



Lillie C. Evans Elementary



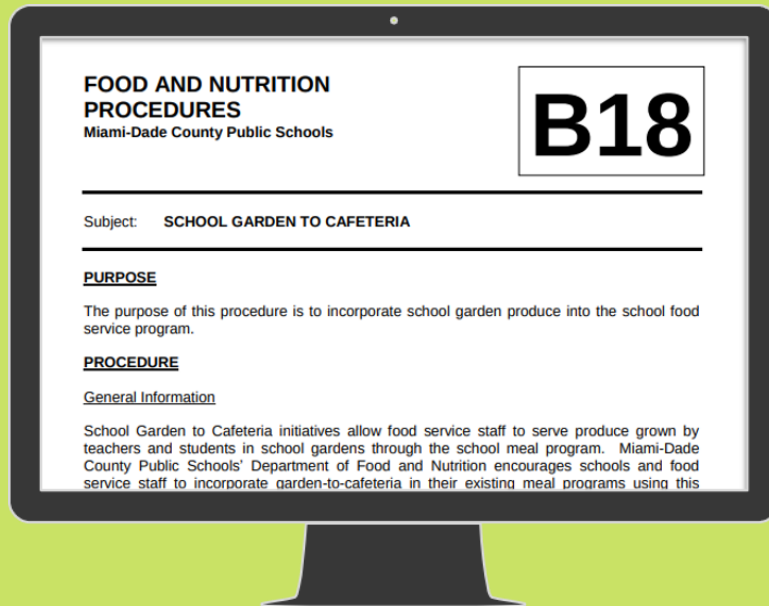
Tropical Elementary

School Garden-to-Cafeteria Food Service Procedure B-18

- Purpose: District procedure to incorporate school garden produce into the school food service program
- HACCP Standards for...
 - Washing
 - Receiving and Storing
 - Serving
- Student, Teacher and Food Service Staff Interaction



Available online in the
“Policies, Documents and
Procedures” tab on
nutrition.dadeschools.net



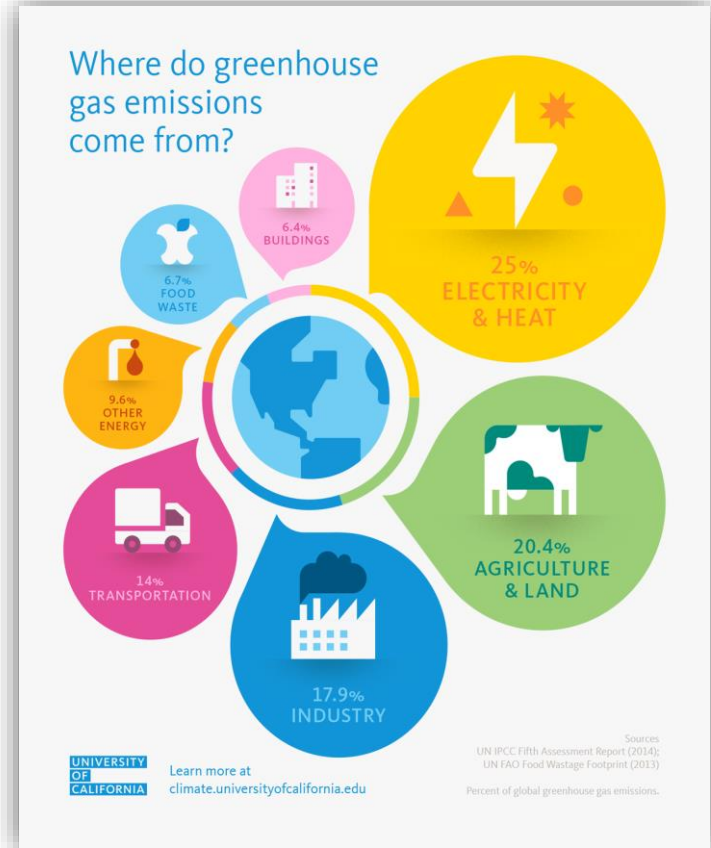
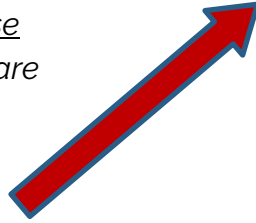


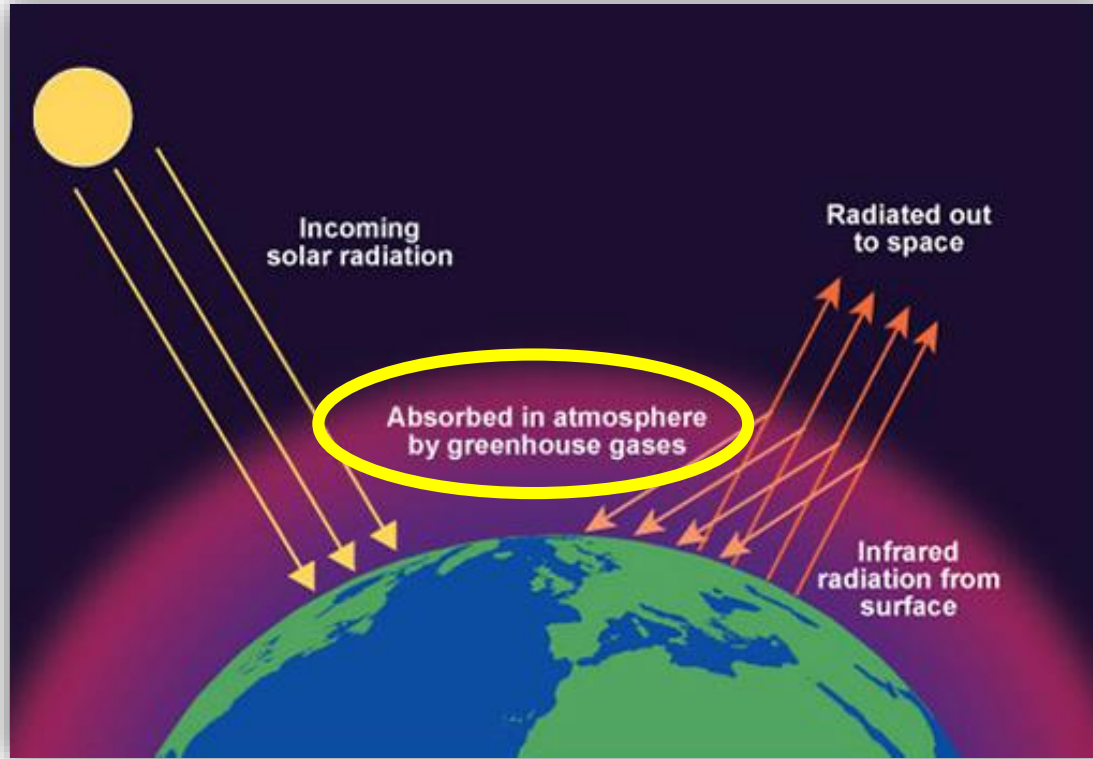
Climate Change & Solutions to Better Our Environment

What can you do at home?

Climate Change

- **Climate Change:** a change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards. *Human-made greenhouse gas emissions, particularly carbon dioxide, are a main reason for climate change.*
- **Greenhouse gases** absorb and trap heat in the atmosphere.

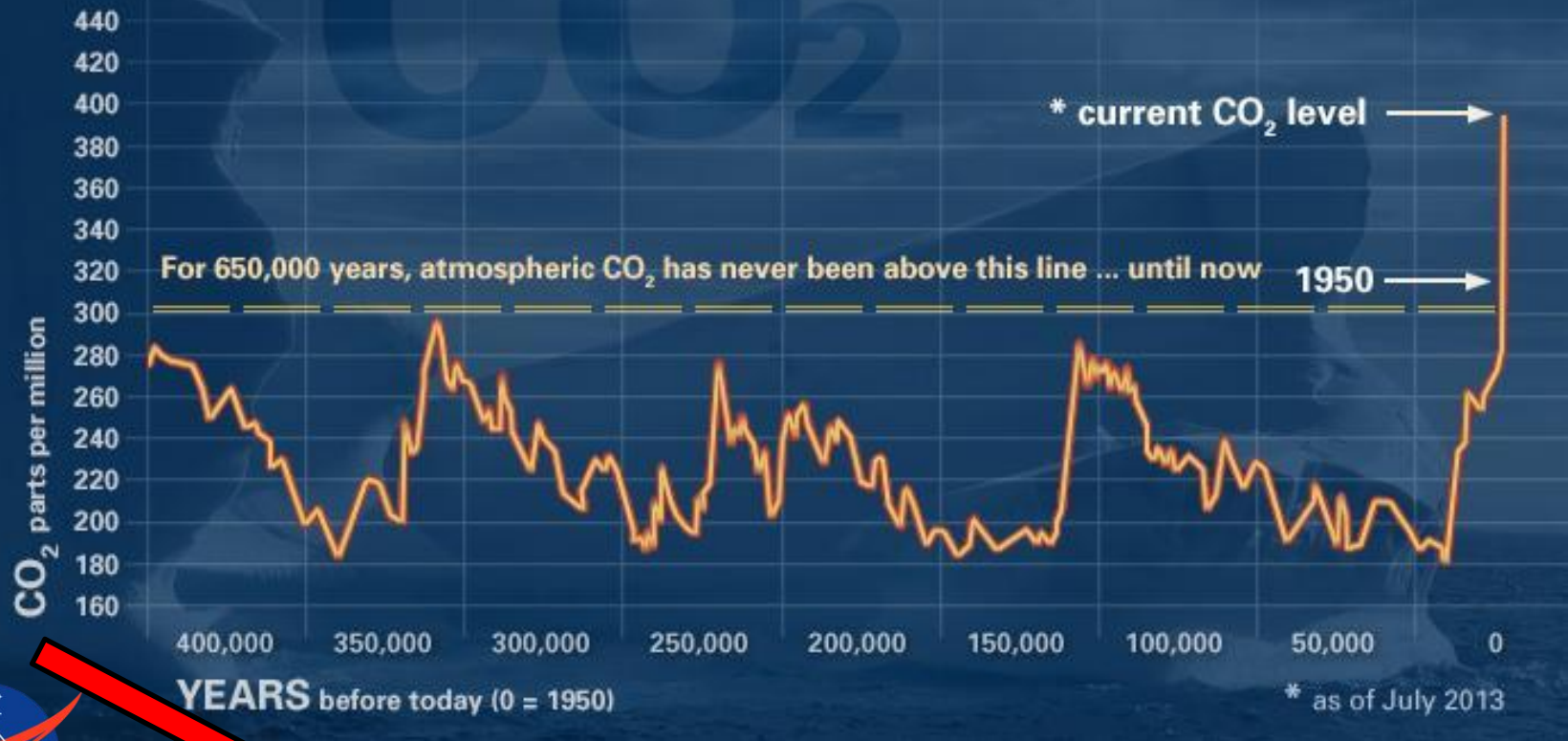




The Greenhouse Effect & Global Warming

The more greenhouse gases we have in our atmosphere → the more heat is retained → the warmer Earth's surface becomes.







Methane, a potent greenhouse gas released from cows, traps **28 to 36 times** more heat in the atmosphere than CO₂.

Effects of Climate Change

- Heat Waves
- Drought
- Wildfires
- Crop Failure
- Coral Reef Degradation
- Stronger Hurricanes
- Rising Sea Levels







Melting Ice and Sea-level Rise

- The Greenland and Antarctic ice sheets have decreased in mass due to global warming
- Glaciers are retreating almost everywhere around the world — including in the Alps, Himalayas, Andes, Rockies, Alaska and Africa



The melting ice flows into the ocean causing sea levels to rise at an accelerating rate.

Climate Ready Miami

Climate Ready Miami

City of Miami has always been vulnerable to hurricanes, storm surge, and flooding, and we have a strong history of thriving in the face of adversity. However, over the past decade Miami's acceptance and response to climate change has emerged as a new factor influencing the growth, and future trajectory, of the City. To ensure a sustainable and enduring future for the City and its residents, City of Miami is taking bold steps towards implementing an innovative and holistic approach to resilience.



Our Challenges



Our Initiatives



[Storm Preparedness](#)



[Coastal and Stormwater Infrastructure](#)



[Roads and Mobility](#)

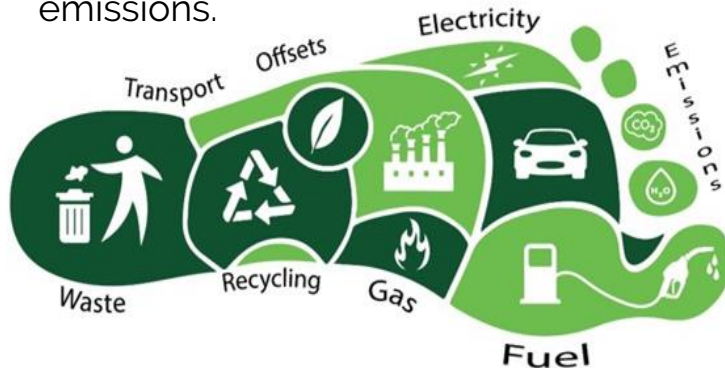


[Parks and Open Spaces](#)

Learn how Miami government is preparing the city for Climate Change at miamigov.com

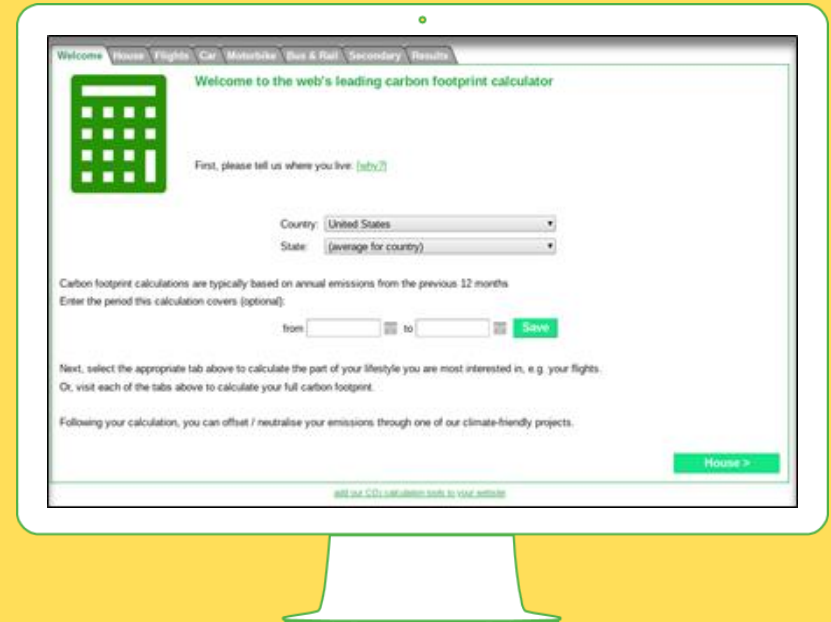
Carbon Footprint Calculator

All of your daily activities that contribute to global warming – like driving a car, throwing out food, and using electricity. These activities, big or small, add carbon to the atmosphere, which increases greenhouse gas emissions.



Find out your Carbon Footprint
with the Online Calculator Quiz

carbonfootprint.com

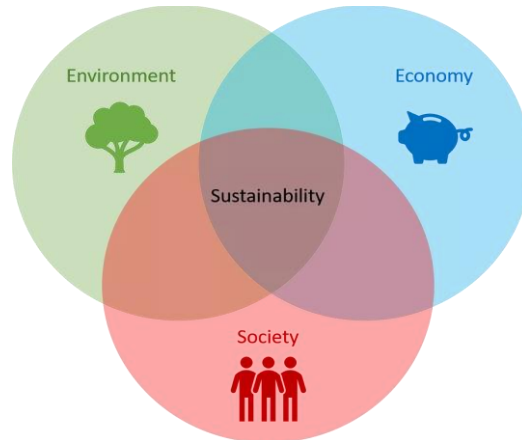


What You Can Do At Home?

1st, Reduce: Use less and buy less items, resulting in a smaller amount of stuff being wasted

2nd, Reuse: Buy durable items once and reuse them, so you don't have to buy new ones

3rd, Recycle: If you can't reduce or reuse, try recycling, so old products can be made into something new



Ways to REDUCE

Water Use

- ☐ Install a low-flow faucet in your sink (find at local hardware store)
- ☐ Shower instead of bath to use less water
- ☐ Take a 5 minute shower
- ☐ Brush without running water



Ways to REDUCE

Electricity use

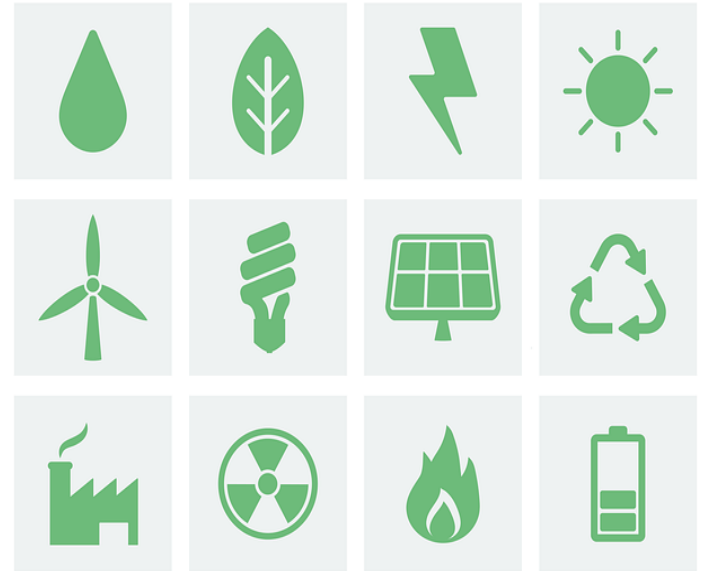
- ☐ Turn off lights
- ☐ Turn off computers at night
- ☐ Adjust thermostat
- ☐ Wash clothes w/ cold water
- ☐ Sealing cracks, gaps, leaks, and adding insulation
 - ☐ Saves you 10% of costs
- ☐ Change light bulbs to LEDs- use 25%–30% of the energy and last 8 to 25 times longer than halogen incandescent



Ways to REDUCE

Electricity use continued...

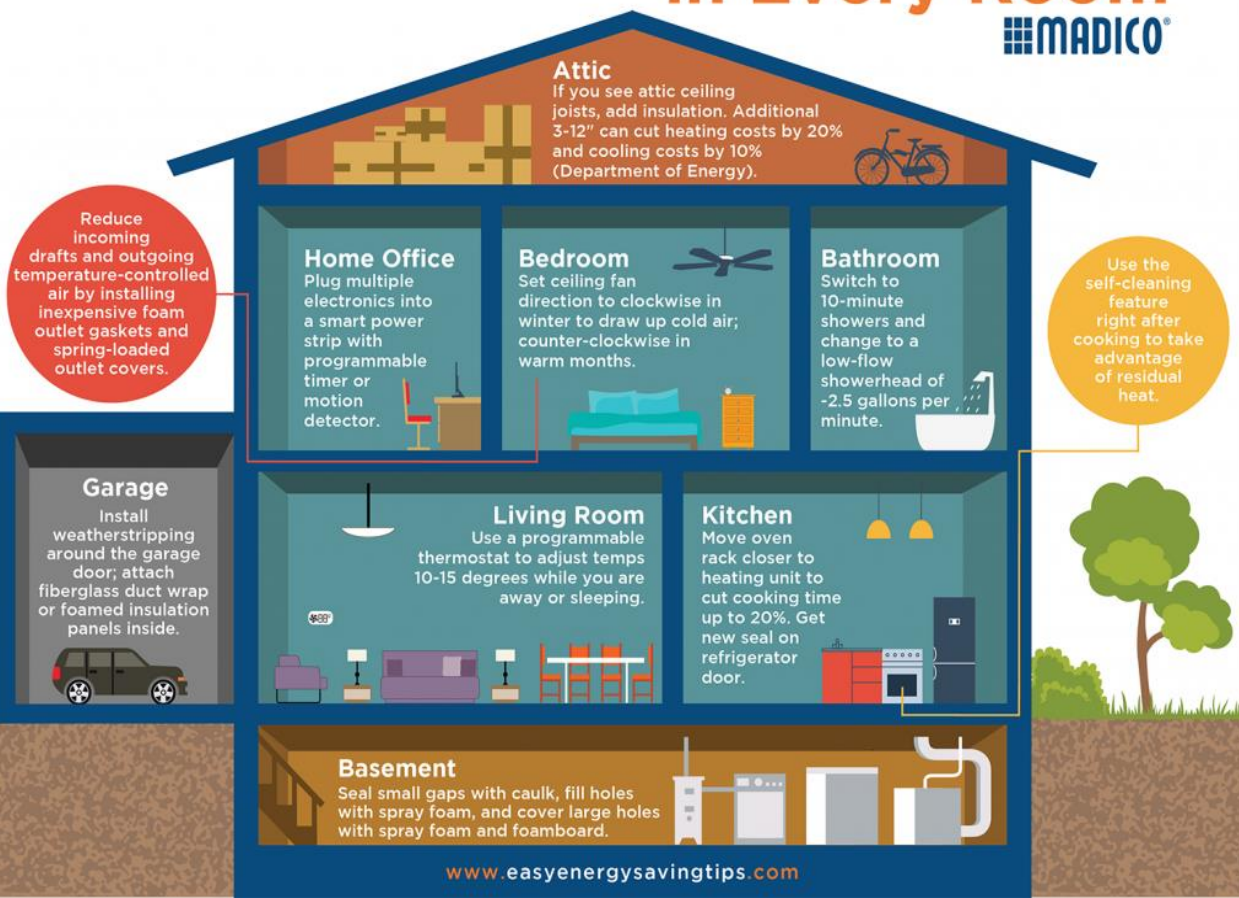
- ☐ Close blinds- warmer months
- ☐ Open blinds- cooler months
- ☐ Clean or replace filters



Saving Energy

in Every Room

MADICO®



For more energy saving tips go to:
easyenergysavingtips.com



Ways to REDUCE


Paper & Plastic Use

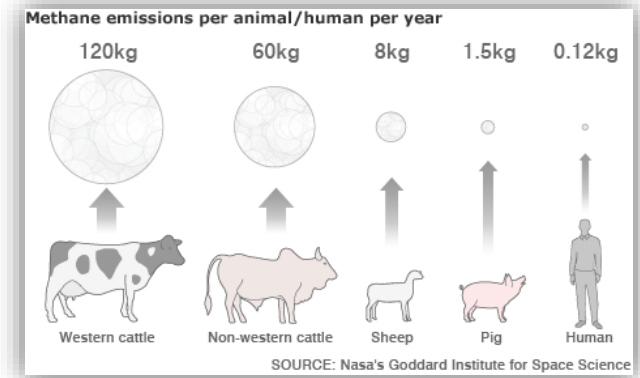
- ☐ Use *less* napkins. Try cloth napkins instead
- ☐ Pay bills *online*
- ☐ Recycle
- ☐ Use reusable water bottles and cups
- ☐ Shop with reusable bags
- ☐ **Stop buying plastic!**



Ways to REDUCE

Consumption

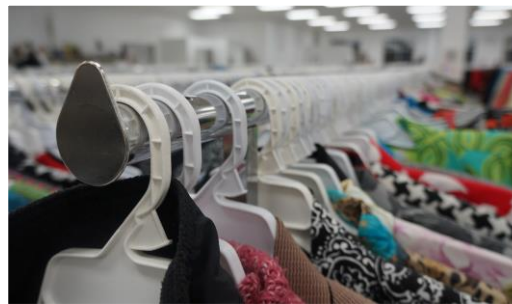
- ☐ Shop at Second-hand Stores
- ☐ **Eat less red meat** 
- ☐ Only shop for what you need
- ☐ Ask yourself these three questions while shopping:
 1. *Is it really necessary to buy/use this item?*
 2. *Will it bring me lasting function and happiness?*
 3. *Will it contribute to pollution and climate change?*



Methane is a potent greenhouse gas

Ways to REUSE

- ☐ Reusable water bottle
- ☐ Cloth napkins
- ☐ Reusable cups
- ☐ Washable utensils
- ☐ Washable plates
- ☐ Reusable bags
- ☐ Shop at Second-hand Stores





Ways to **RECYCLE**

Turn old products into something new!



What goes into the landfill trash?

FOOD



LIQUIDS



**PLASTIC BAGS
& WRAPPERS**

STYROFOAM



What goes into the recycle bin?



**NOT Plastic Bags
or Wrappers**

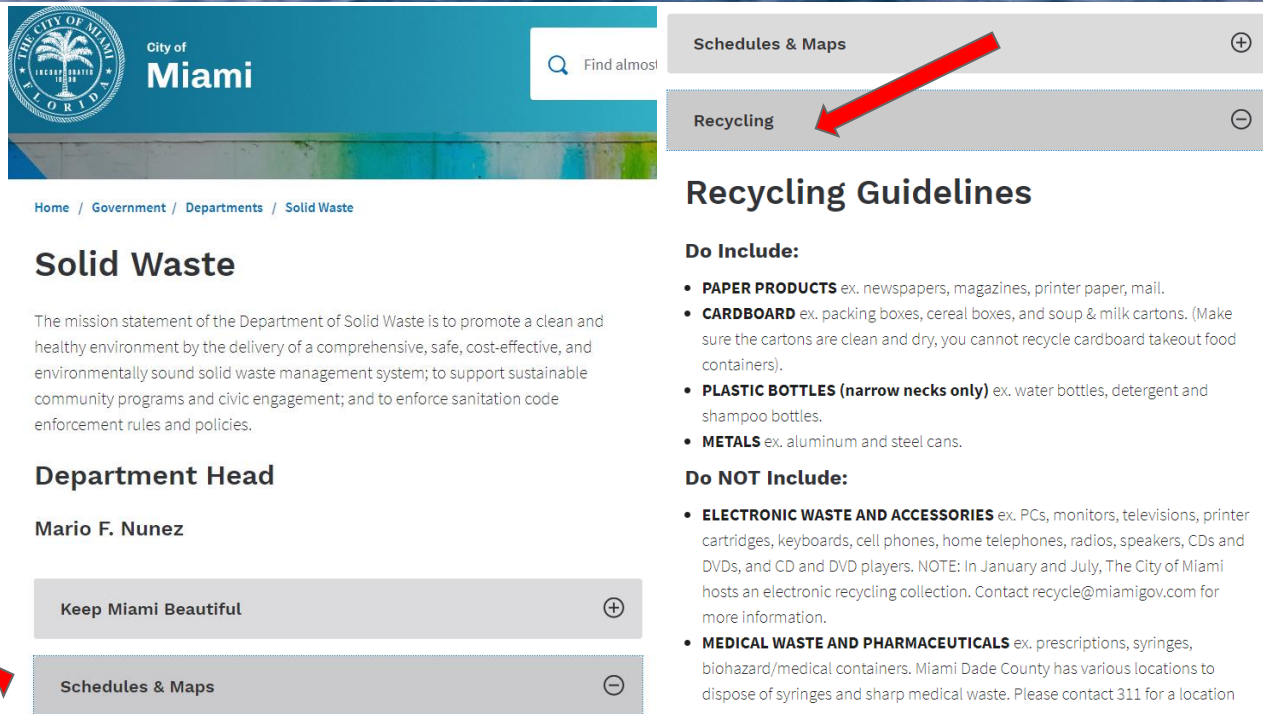


City of Miami Single Stream Recycling

For more information:

<http://miamigov.com>

[/solidwaste](http://miamigov.com/solidwaste)



The screenshot shows the City of Miami website. The header includes the City of Miami logo and a search bar. The main navigation bar has links for 'Schedules & Maps' and 'Recycling'. The 'Recycling' link is highlighted with a red arrow. Below the navigation bar, the 'Solid Waste' section is displayed, including the mission statement and the Department Head, Mario F. Nunez. The bottom navigation bar has links for 'Keep Miami Beautiful' and 'Schedules & Maps'. The 'Schedules & Maps' link is highlighted with a red arrow.

City of Miami

Home / Government / Departments / Solid Waste

Solid Waste

The mission statement of the Department of Solid Waste is to promote a clean and healthy environment by the delivery of a comprehensive, safe, cost-effective, and environmentally sound solid waste management system; to support sustainable community programs and civic engagement; and to enforce sanitation code enforcement rules and policies.

Department Head

Mario F. Nunez

Schedules & Maps

Recycling Guidelines

Do Include:

- **PAPER PRODUCTS** ex. newspapers, magazines, printer paper, mail.
- **CARDBOARD** ex. packing boxes, cereal boxes, and soup & milk cartons. (Make sure the cartons are clean and dry, you cannot recycle cardboard takeout food containers).
- **PLASTIC BOTTLES (narrow necks only)** ex. water bottles, detergent and shampoo bottles.
- **METALS** ex. aluminum and steel cans.

Do NOT Include:

- **ELECTRONIC WASTE AND ACCESSORIES** ex. PCs, monitors, televisions, printer cartridges, keyboards, cell phones, home telephones, radios, speakers, CDs and DVDs, and CD and DVD players. NOTE: In January and July, The City of Miami hosts an electronic recycling collection. Contact recycle@miamigov.com for more information.
- **MEDICAL WASTE AND PHARMACEUTICALS** ex. prescriptions, syringes, biohazard/medical containers. Miami Dade County has various locations to dispose of syringes and sharp medical waste. Please contact 311 for a location near you.

Go Green: Start a Garden

Start a garden

- In the yard
- On the balcony
- On a windowsill

or

Join a Community Garden



North Miami Elementary



Edible Plants that Grow in South Florida



Plants that Grow Indoors

- Jade plant
- Aloe vera
- English Ivy
- Pothos
- Snake plant
- Ficus
- Peace Lily
- Aroid Palm



Where to get Gardening Information?



Local Garden Center or
Landscape Nursery

UF | **IFAS Extension**
UNIVERSITY of FLORIDA

dade@ifas.ufl.edu

(305) 248-3311

18710 SW 288th Street

Homestead, FL 33030



Tips to Lighten your Carbon Foodprint

Buy locally and in season

Why?

- Less **Food Miles**
- Fresher Food
- Supports Local Businesses

How?

- Farmers Markets
- Local Small Markets
- Apps

Food Miles: the amount of miles and energy required to transport, process, and distribute food to the consumer.

Local Food: food grown in or around the region where you live



Local Farmers Markets

Downtown Miami:

- Brickell City Center Farmers Market
- Adrienne Arsht Center Farmers Market
- Upper East Farmers Market in Legion Park
- [Government Center Farmers Market](#)
- [Civic Center Market](#)

Miami Beach:

- Lincoln Road Farmers Market
- South Pointe Farmers Market
- Farmers Market of Normandy Village

Aventura:

- Aventura Mall Farmers Market

Coconut Grove and Coral Gables:

- Coconut Grove Farmers Market
- Farmers Market of the University of Miami

South Dade:

- Redland Market Village
- Southwestern Community Farmers Market
- Pinecrest Garden Green Market
- [Kendall Village Farmers Market](#)
- [Kendall Farmers Market](#)

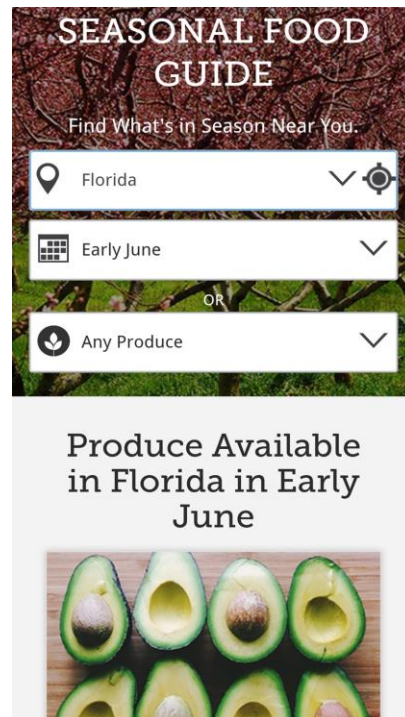
App: Seasonal Food Guide




Seasonal Food Guide

- Find out what's growing near you
- Search by month
- Search by name of produce
- Cooking tips

FREE for iPhone & Android users



Volunteer Opportunities

- Beach Cleanups: Volunteercleanup.org

- Local community gardens:
 - University of Miami Community Garden-Coral Gables
 - FIU Community Garden-Miami
 - Little Haiti Community Garden- Little Haiti
 - The Overtown Green Haven Community Garden (NW 2nd Ave)
 - Pine Tree Park Community Garden-Miami Beach
 - North Beach Community Garden-Miami Beach
 - Joseph Villari Victory Garden-South Beach

Facebook is a great resource for finding a volunteer community!

“
We have the world to live in on the
condition that we will take good care of
it. And to take good care of it, we have to
know it. And to know it and to be willing
to take care of it, we have to love it.”

-Wendell Berry, American Poet, Farmer, and Environmental Activist



Takeaway Message



Make small steps towards the
right direction

How can you use these tools?

Share these tools with your
community

Make a positive impact on the
Earth



Go Lean & Green for a Healthy Environment and Wellness

M-DCPS Department of Food and Nutrition
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