

# Teaching Climate Change Science using Social Change Strategies

***Eugene C. Cordero***

***Department of Meteorology***

***San José State University, California***

# Why Social Change?

- Make topic/class/content real
- Give students sense of personal connection to climate change
- Provide students with experience of being an activist

# Social activism

- What is it?
- Why do it?

# Examples from our schooling?

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# Goals/Learning Objectives

**To design a social change learning  
experience**

# Examples

- Personal carbon or ecological footprint
- Climate change solutions

# Personal Carbon Footprint (I)

- Calculate annual carbon footprint
  - Gather energy/transportation data
  - Do simple calculation
  - Consider what's missing
  - Hypothesize what's missing

# Personal Carbon/Ecological Footprint (II)

- Calculate annual carbon footprint
  - Web based calculator (e.g. [myfootprint.org](http://myfootprint.org) or [footprintnetwork.org](http://footprintnetwork.org))
  - Focus is much broader and enables students to reach their own conclusions
  - Ask students to reduce footprint and justify (take action)
  - Individual or teams?

# Carbon footprint reduction (others)

- Engage others to reduce carbon emissions
- Human interaction
- Justification can be required as part of analysis.
- Reflection can be interesting.

# Climate Solutions Class

- Course devoted to small group projects
- Multiple faculty involved from different colleges.
- Teams competing for prize.
- Judged by independent panel.

# Through You, Through Food

Sarah Callahan - Spanish/Art

Wei Kie Fong - Public Health

Kathleen Hendricks - Business

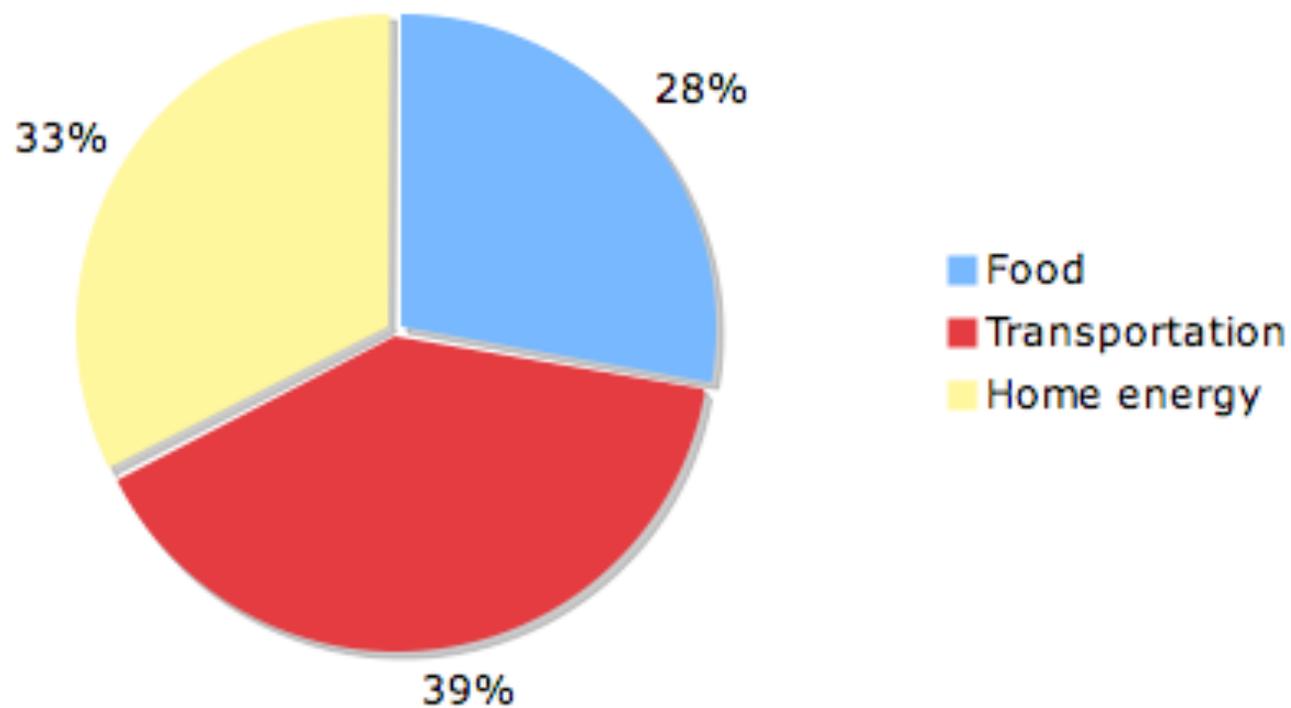
Elizabeth Jalone - Business (MBA)

Justin Mackiewicz - Engineering

**Goal:** To reduce the food related carbon footprint of SJSU

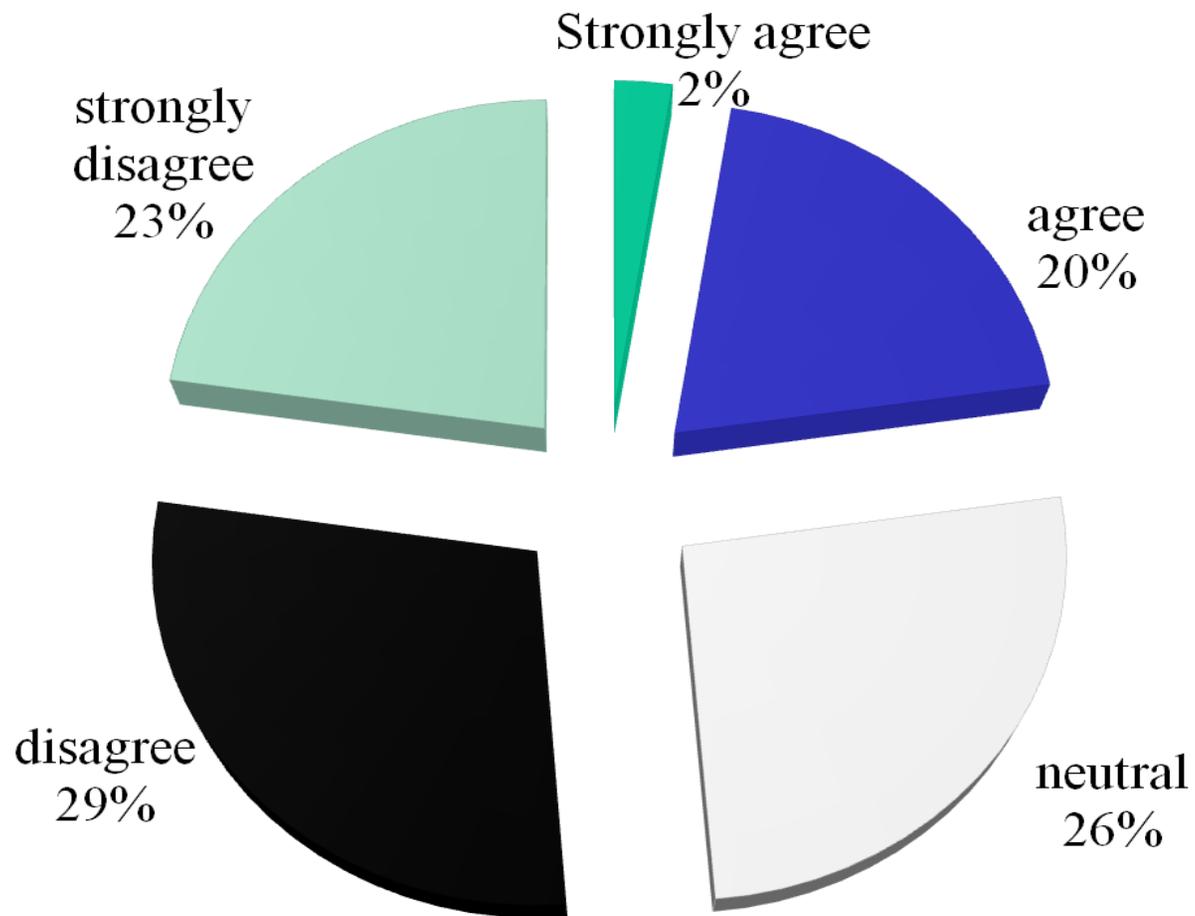
**Methods:** Research and social marketing

## SJSU Student Carbon Footprint



Total carbon footprint = 16,605 lbs of CO<sub>2</sub> per year

## First Survey: Eating a Vegetarian Diet can Reduce Global Warming



# Various media were used to communicate our message

- Posters
- Postcards
- Facebook
- Environmental Awareness Fair



**WHAT DOES  
YOUR  
FOOTPRINT  
LOOK  
LIKE?**

**STAY TUNED**

**IN FRONT OF  
STUDENT UNION  
NOVEMBER 18**

**w****orld**  
*thru you thru food* **greened**

**CO<sub>2</sub> OF...**

**EATING**

**DRIVING**

**1/4 LB = 24.5 MILES**

**OF**

**IN A**

**BEEF**

**PRIUS**

**LESS BEEF LESS CO<sub>2</sub>**

**STAY TUNED**

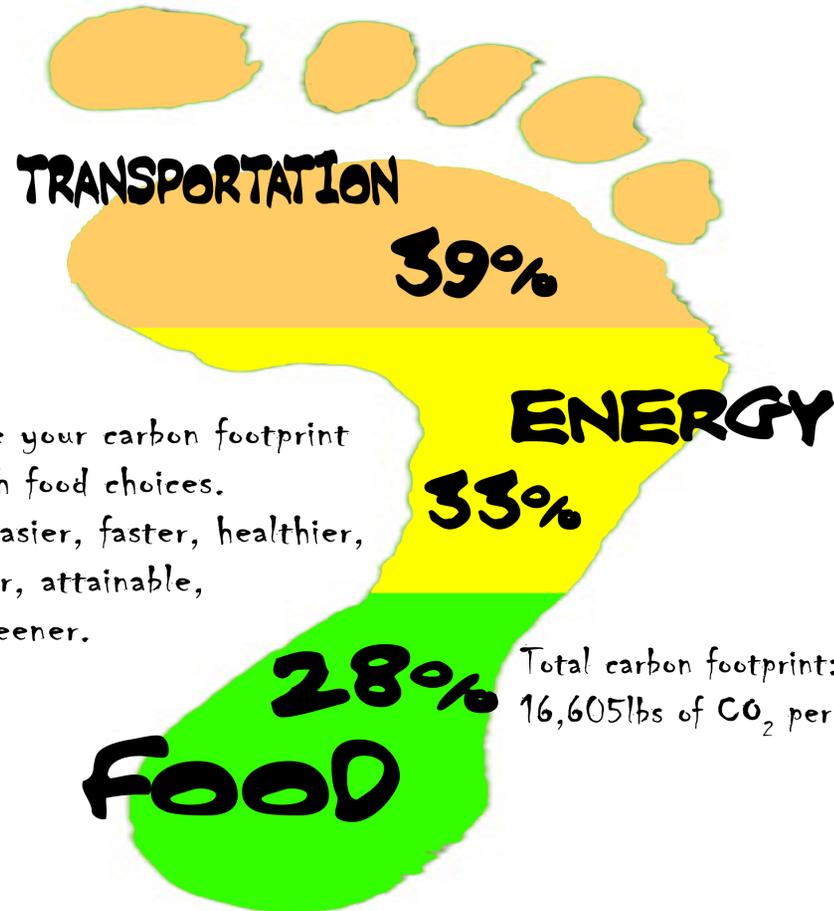
**NOVEMBER 18**

**IN FRONT OF THE STUDENT UNION**

facebook group: thru you thru food

**wORLD**  
*thru you thru food* **greened**

# THE CARBON FOOTPRINT OF AN SJSU STUDENT



Reduce your carbon footprint through food choices. It is easier, faster, healthier, cheaper, attainable, and greener.

Total carbon footprint: 16,605lbs of CO<sub>2</sub> per year

Lower carbon food choices: vegetables, grains, beans, and chicken  
Higher carbon food choices: beef, lamb, and salmon





What does your foot print



Look Like?

Tuesday, November 18  
12:00-4:00 pm  
Art Quad





# World **Greened**

*through you through foods*

## **WHAT DOES YOUR FOOTPRINT LOOK LIKE?**

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Food choices can have a larger impact on global warming than the type of car you drive.



The average cheeseburger is responsible for producing over 10 pounds of heat trapping gasses (CO<sub>2</sub>), which is equivalent to driving a car 13 miles.



Carbon friendly food choices:

Chicken instead of beef

Seasonal fruits and vegetables

Fresh foods instead of processed foods

**Find out more @ the art quad on  
Tuesday, November 18<sup>th</sup>**

Check out our Facebook group: [thru you thru food](#)

Email: [thruyouthrufood@yahoo.com](mailto:thruyouthrufood@yahoo.com)

# Environmental Awareness Fair

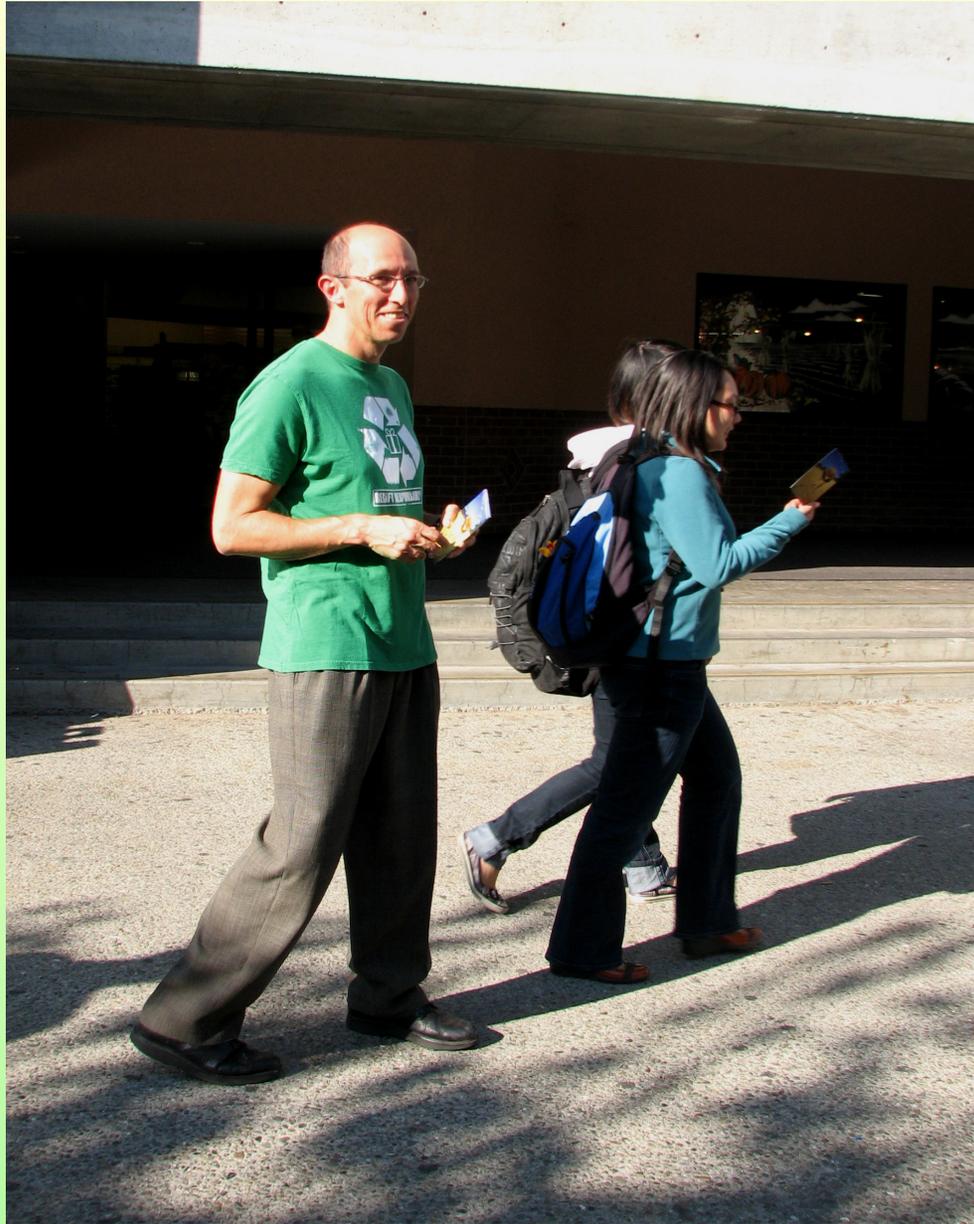
November 18, 2008

Art Quad

(With contributions from the Nutrition Department)











“I pledge to make a  
green food choice this  
week”







I PLEDGE TO  
MAKE A  
GREEN FOOD  
CHOICE  
THIS WEEK

FOR THE  
WEEK OF  
MAY 14-20  
2012  
PLEASE  
BRING A  
RECYCLED  
BOTTLE

FOR THE  
WEEK OF  
MAY 14-20  
2012  
PLEASE  
BRING A  
RECYCLED  
BOTTLE

Phase 2:

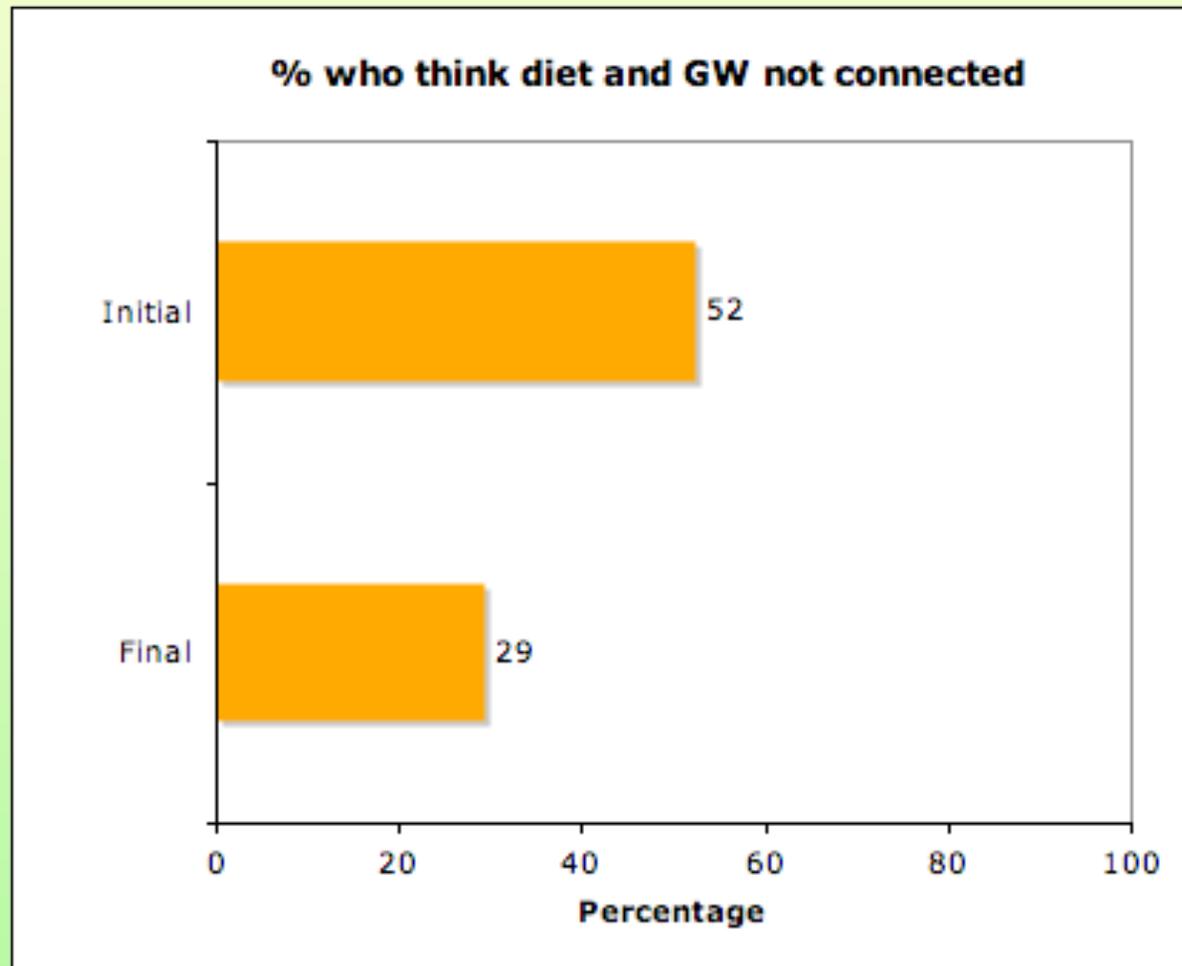
Dining Commons



# Final Survey



# Initial Survey vs Final Survey



# Summary

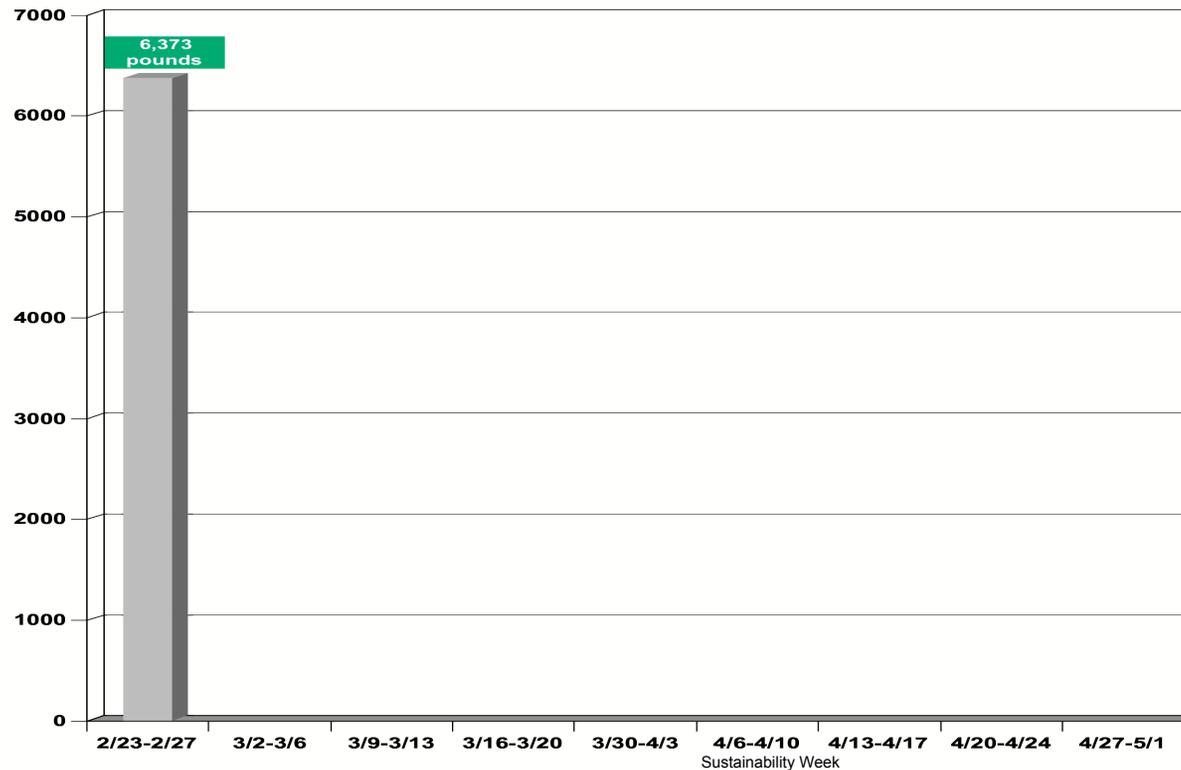
- Reducing SJSU's food footprint by 25%
  - Would reduce 36 million lbs of CO<sub>2</sub> annually
  - Equivalent to removing 4400 cars
- Solutions
  - Simple
  - Cost effective
  - Promote personal health
  - Promote more enjoyable living



# Let's Work Together to Reduce Waste!

## Green & Healthy with Spartan Shops

### Pounds of uneaten food thrown away every week (M-F) in the DC:



#### Did you know:

- Students eating in the DC throw out over 1,000 lbs of food every day. That's enough food to feed 780 people!
- The average amount of waste is **1/2 pound PER PERSON, per meal!** Because of the energy it takes to grow food, your food waste produces 5 lbs of carbon emissions per day. That's equivalent to idling a car for 40 minutes. **Wasting food is bad for the environment!**

#### What you can do:

- **Think about how much food you will actually eat, and take only that amount.** Remember, it takes at least 20 minutes for your brain to register fullness. So, before going back for more, give your brain time to register those signals.
- Not sure you're going to like something? **Take a taste.** If you like it, come back for more. If not, you haven't thrown away a whole plate of food!

*Let's work together to create a sustainable campus!*