Trayless Tuesdays Miami Palmetto Senior High School

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Sponsor – Pamela Shlactman
Pinecrest, FL

Our Goals: The Carbon Footprint

- According to askkids.com a carbon footprint is defined as follows:

"The carbon footprint is the impact of the CO2 emissions we make on the Earth. There are primary and secondary footprints. Primary footprints are the burning of fossil fuels, like cars and planes. Secondary footprints are from the products we use, like furniture, food, clothing and anything else we purchase."

- We wanted to reduce our carbon impact on the world. Before, we focused on our school and community's impact. We've expanded our project. Not only are we focusing on our larger community but also our global community. This main project of reducing our global carbon footprint, has many components, aimed at various levels of awareness, involvement and participation, and reduction of the carbon footprint.
- Why? Carbon emissions affect global warming, air pollution, climate change, and, in effect, water pollution, your way of life, ecosystems, and so much more!

*And to reduce our solid waste in landfills too!

Our Project ☺

- **Trayless Tuesdays:**
  - Goal: Going county-wide (Miami Dade County Public Schools) and beyond!
    - Schedule meetings with the county Food and Nutrition Board, developing another action plan for use in other schools.
    - Advertise for the Trayless Tuesdays program – school TV network, Facebook, flyers, district website.
    - Work with the cafeteria and the district to produce a lunch menu that is servable without a tray.
    - How to quantify impact - How many people are participating? How much Styrofoam-use can we eliminate?

Trayless Tuesdays

- We developed a program called "Trayless Tuesdays" in our school lunch system. Every Tuesday, lunch is served in a paper box, on a wax paper, or in a paper bag.
- The benefits of this program include:
  - Decreased cost of Styrofoam trays by 20% - money saved can go towards replacing Styrofoam trays on one other day with biodegradable lunch trays
  - Decrease of Styrofoam use in our school by 20 %
  - Faster speed of lunch lines
  - Decrease of our school's Carbon Footprint significantly: less Styrofoam to produce, less Styrofoam to transport (both as consumption and as a waste product)
- Trayless Tuesdays incorporates this main idea: Every piece of Styrofoam ever created is still in this earth today. Styrofoam takes eons to decay and is very harmful to the environment when melted or incinerated. Styrofoam is also taking up a large piece of our landfill because it never decays so it is taking up precious land that other garbage can be put on. Because Miami has such limited space for landfills due to the residential areas, our team thought Trayless Tuesdays could make a huge impact on our community by lowering the amount of waste that is sent to the landfill.
- Our group has been meeting with officials from the Food and Nutrition Department of Miami Dade County Public Schools.
- Success! - expanded involvement, participant satisfaction (students, lunch staff, school administration, Department of Nutrition), increased awareness of the effects of Styrofoam

Challenges

- Trayless Tuesdays – we had to keep in touch with the Food and Nutrition Department at all times so they could monitor our progress. At the same time, we had to educate our peers about the importance of waste reduction and persuade them to give up trays (changing the status quo is harder than it would seem!).
- At first, some students found the Trayless Tuesdays to be annoying as it slowed down the food lines. However, because lunches can be handed out quicker, Trayless Tuesdays became a preferred day to buy lunch as students could get their lunch faster.

Quick Step-by-Step

- 1. Formed a group to work on project and asked Ms. Shlachtman (teacher) to sponsor.
- 2. Spoke with our Lunch/Cafeteria manager, got emails of people to contact
- 3. Scheduled meeting with Mr. Weiner, our principal. Showed him our letter to Penny Parham, brought him on board, he emailed our project idea/letter to Ms. Parham (Director of Food and Nutrition)
- 4. Scheduled meetings with Food and Nutrition, about once a month, with our principal, the Food and Nutrition Green Team, our team, our sponsor, and the cafeteria manager.
  - Cafeteria manager reorganized the school lunch menu to incorporate foods that could be eaten without Trays, i.e.: pizza, hotdogs, chicken fingers, rice and chicken (in paper bowls), etc.
- 5. TVP announcements, flyers, and classroom visitations (optional) to inform the school
- 6. October = test-trial days, Trayless Tuesdays officially started at the end of October.
- 7. Commercials produced to raise awareness and support, school newspaper articles (online too)

Food and Nutrition Director

Letter to Penny Parham

- Dear Penny Parham,
- We are from Ms. Shlachtman's Solar Energy Class about Environmental Action at Miami Palmetto Senior High School. Our names our Monica Dyches (junior), Diana Davenport (senior), Gregory Hoffman (senior), and Rachel Lee (junior) and we are currently leading the school project to help "green" up our school. Did you know that polystyrene is the 5th largest producer of hazardous waste? Polystyrene is a possible carcinogen and everyday, workers are exposed to this pollutant. The production of polystyrene releases hydrocarbons into the air which adds to the degradation of our ozone and it's made with petroleum, a unsustainable and heavily polluting resource. Polystyrene is Styrofoam. Everyday, we use Styrofoam across the school. It's in our packaging and it's in our cafeteria. We eat on Styrofoam plates and this is really bad because hot foods can be contaminated from toxins that are released when Styrofoam is heated. We have decided that we would like to change this extremely destructive habit in our school. Other schools have already made the switch.
- We would love to replace our Styrofoam lunch trays with biodegradable trays, however we understand the expenses of such a switch may be high. What we propose is a switch to something cheaper than compostable trays – maybe a paper tray or even a paper plate? Many schools have also started the program "Trayless Tuesdays" which simply means that they don't use any Styrofoam trays on Tuesdays. Instead the cafeteria serves foods like sandwiches and pizza that can simply be handed with a napkin, or the school gives them smaller paper trays to put their food in. Trayless Tuesdays would definitely help offset the costs of switching out of Styrofoam plates. With Trayless Tuesdays, you could potential save 20% on the cost of buying the Styrofoam trays. Hopefully, we could use this money to buy better trays for the other days or day of the week. Every little but counts. Every piece of Styrofoam ever made is still around in landfills or in the air we breath because often, Styrofoam is incinerated. Another option is doing what Southwood Middle School does and "recycle" our trays with one of those machines that clean the Styrofoam lunch trays. Right now, anything is an option, we just want to choose the best one because any alternative is better than what we've got.
- Please, please, please consider our proposal. We need to live in a sustainable environment and polystyrene is one of the worst pollutants there are around and it's right here in our school! How many trays do we use every day? Think of how much we could save by just limiting the use of the trays once a week or more! Help us live in a responsible community. We would love to sit down with you (or even talk on the phone) and discuss this pressing issue ASAP. If it's convenient, we could meet next week at Miami Palmetto Senior High School or we could come to you after school sometime. If you have any information and could help us, we would really love your assistance.
- Thank You! Sincerely,
- Ms. Shlachtman's Solar Energy Class
- Monica Dyches, Gregory Hoffman, Diana Davenport, Rachel Lee, Ellora Sarkar
- You can contact us through Ms. Shlachtman's extension or email Principal Weiner.
- 305 235 1360

Letter contd.

- Other important information:
- http://www.sosnyc.org/
- http://www.midweek.com/content/columns/entrepreneurs_article/a_green_alternative_to_styrofoam/
- http://green4u.wordpress.com/2008/05/22/why-styrofoam-is-bad/
- http://www.earthresource.org/campaigns/capp/capp-styrofoam.html

- Schools across the country are switching: NYC has all 1,500 schools switched to Trayless Tuesdays and serve food on recyclable paper.
- http://www.sosnyc.org/index.html

- *By 1986, styrene was found in 100 percent of all samples of human fat tissue taken as part of a U.S. Environmental Protection Agency (EPA) Human Tissue Survey. Researchers found that Styrofoam cups lose weight when in use, meaning that styrene is oozing into the foods and drinks we consume. It then ends up stored in our fatty tissue, where it can build up to levels that can cause fatigue, nervousness, difficulty sleeping, blood abnormalities, and even carcinogenic effects.*
- *(source: http://www.greenhome.com/info/news/41.shtml)*

- Polystyrene recycling is not "closed loop" – collected polystyrene cups are not remanufactured into cups, but into other products, such as packing filler and cafeteria trays. This means that more resources will have to be used, and more pollution created, to produce more polystyrene cups. *-"Plastics Industry Grasps for Straws," Everyone's Backyard, January/February 1990, Citizen's Clearinghouse for Hazardous Waste, p. 6.*
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- *http://green4u.wordpress.com/2008/05/22/why-styrofoam-is-bad/*

Quantifiable Results

- Lunch waste reduction (Trayless Tuesdays):
  - Before Trayless Tuesdays:
    - 216,000 Trays used annually, school wide → 126,274 lbs. of CO_2 emitted
  - After Trayless Tuesdays:
    - 172,800 Trays used annually, school wide → 101,019 lbs. of CO_2 emitted
  - Overall – 43,200 trays kept out of landfills and 25,255 fewer lbs. of CO_2 emitted annually
  - If trends continue and all Miami Dade schools take up the program, county wide CO_2 emissions will drop by over 2,600,000 lbs.
  - All students at our high school (a total of 2985 students, about 1200 of whom eat hot lunch daily) participate in the program as of now, and are aware of its positive environmental impacts.

What we learned

- Over the course of the project we learned a lot, both about carbon emissions and global warming, and about the power of a team to change the world.
- Carbon emissions and global warming – We further explored the causes of global warming and carbon emissions, learning that using less is the best way to reduce a carbon footprint (which is why we started Trayless Tuesdays). We also learned how easy it is to reduce a carbon footprint – if everyone takes little steps, the combined effort can make a huge difference. It was really amazing how many people agreed to contribute to our efforts once they realized that if was only a small amount of effort on their part. Just planting a tree or donating a dollar towards reforestation can make a huge difference!
- Teamwork – this project encouraged and required us to reach out to the community; in fact without their support we could never have been so successful. It is much easier to make a difference with the support of many – and if a lot of people all do their own small contribution, we can make a huge difference (the idea behind all our programs, which required small amounts of personal effort that added up to make a huge difference).
- We also gained a huge amount of respect for the many connections to be found all throughout nature. The six degrees of separation enable reforestation to directly affect fish populations in Haiti, and other, similarly unpredictable effects. It reminded us to be careful of our actions, because one small action can have multiplicative, unintended consequences.
  Specifics:

  - Monica: "Every day in the news you hear about our deteriorating environment. With about 3,000 students at our school, we're bas big as small town! We have the power to really make a difference. Trayless Tuesdays was a lot of work but well worth the effort. This was our green initiative and we're all enthusiastic about it! ☺"
  - Diana: "I've learned that every little effort you make can make a huge difference. We had a vision to make our school a better place for the environment and we followed through. It doesn't take much to help be more environmentally friendly, you just have to be conscious about your actions."
  - Greg: "What did I learn: that people really do want to reduce their carbon footprint, it's just a matter of them being made aware of how they can do so. What was a challenge: Choosing what to do out of the many ideas we came up with!"
  - Rachel: "I learned that if you want something or have an idea you need to act on it because you can make a difference. And a challenge was learning how to contact people by calling and emailing and meeting people I appointments, and then re-calling and re-emailing and doing the whole process over again to get our goals accomplished."
  - Ellora: "I learned how easy it is to make a difference when you're with a group of friends. Everyone can take small steps but together you can start a huge movement - even one that affects people and students countywide. I also learned the importance of spreading awareness and how that can be just as important as action"