

Foodprint: A concept for more sustainable food shopping

With growing concern for the well-being of the planet and the impact of human activities on climate change, the manner in which we purchase and consume food plays a significant role in our personal carbon footprint. Knowing where our food comes from and how it got to our local market shelves can help shoppers make informed decisions about consuming locally grown foods rather than those that must be flown in from around the world, buying organic produce from the Pacific Northwest versus non-organic from local California growers, or buying wild caught fish from Alaska instead of farm-raised fish from Chile. Each of these produce a different set of concerns for the ecological footprint of food consumption and our US supermarkets are not currently providing the necessary information to help shoppers make these kinds of informed decisions.

The United Kingdom, the government recently unveiled a plan to place carbon labels on certain food products. These display labels will show “the greenhouse gas emissions created by their production, transport and eventual disposal”¹ of food products, in a similar way to that of nutritional guides on food packaging. Furthermore, the UK-based supermarket chain Tesco has promised to place these labels on all 70,000 of their products, as well as reduce the carbon footprint of their overall business. Tesco is aiming to reduce energy use in all of their office buildings, as well as in their stores (by half), by 2010.

There are currently no services or food labels in the US that offer this kind of information to shoppers, making it more difficult to understand the impact our food consumption has on environmental sustainability. *Foodprint* is a concept for a mobile- and web-based tool designed to help consumers make more informed decisions about the food they buy, where it comes from, and the environmental impact of the processing and transport of food items from source to market.

The *Foodprint* experience begins in your local market with foods marked with 2D barcodes. If you wish to learn more about the origin of your product, how much CO₂ and other greenhouse gases were released in the transport of a specific food, and the availability of alternative products, you can use your mobile phone to take a photo of the barcode, which will return information about that product. From there, you can then choose to save this information to your personal *Foodprint* page for a closer look at the overall impact of your shopping day, as well as receive suggestions about similar products and tips for more sustainable shopping. *Foodprint* also provides a visualization of the transportation routes your food takes and a breakdown of the CO₂ emitted, as well as a printable or text-based shopping list for your next trip to the market.

¹ From the Guardian Online, May 31, 2007: <http://www.guardian.co.uk/environment/2007/may/31/greenpolitics.retail>

As part of the initial investigation, a variety of products were selected from the Trader Joe's Market. The miles traveled to arrive at the Trader Joe's Market, as well as the amount of CO₂ emitted in the process, was assessed using the TerraPass Carbon Footprint Calculator². Though calls were made to the Trader Joe's corporate office, it was difficult to determine the exact modes of transportation that are used for each of the products on the initial shopping list. Therefore, for this concept design, the CO₂ calculations are based on air travel and driving, and are used as representations rather than completely accurate data.

links of relevance:

The Food Carbon Footprint Calculator

<http://www.foodcarbon.co.uk/calculator.html>

<http://localfoods.wordpress.com/2007/12/10/the-food-carbon-footprint-calculator/>

Carbon labels to help shoppers save planet - The Guardian

<http://www.guardian.co.uk/environment/2007/may/31/greenpolitics.retail>

Carbon Footprint Labels for UK Produce

http://www.treehugger.com/files/2007/05/carbon_footprin.php

Measuring our Carbon Footprint - Tesco

<http://www.tesco.com/climatechange/carbonFootprint.asp>

Carbon Trust Carbon Reduction Labels

<http://www.carbon-label.co.uk/>

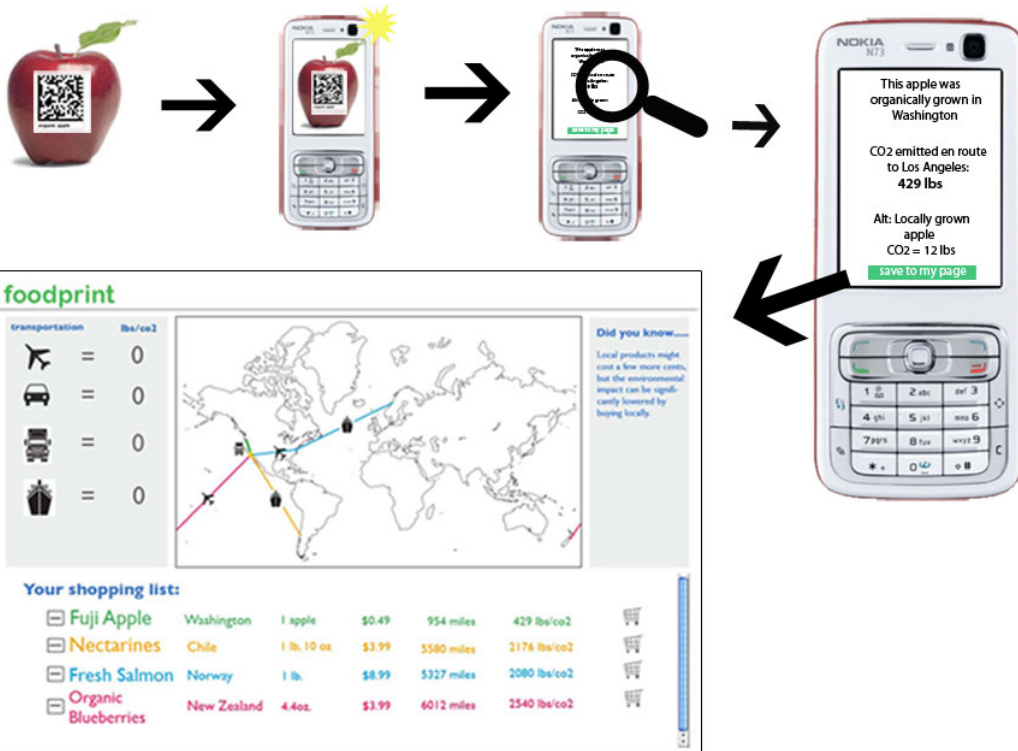
The Cheeseburger Footprint

http://www.openthefuture.com/cheeseburger_CF.html

Getting Ready for Earth Day: Eat Local Food

<http://www.treehugger.com/files/2007/04/earth-day-eat-local-food.php>

² TerraPass Carbon Calculator can be found here: <http://www.terrapass.com/carbon-footprint-calculator/#air>



foodprint

transportation	lbs/co2	
✈️	=	3555
🚗	=	0
🚚	=	429
🚢	=	3241
total:		7225

did you know.....




You can offset the co2 from this shopping trip by purchasing \$24 in carbon offsets.

These offsets go towards research and development of sustainable energy.

your current shopping list:

<input type="checkbox"/>	Fuji Apple	Washington	1 apple	\$0.49	954 miles	429 lbs/co2	🛒
<input type="checkbox"/>	Nectarines	Chile	1 lb, 10 oz	\$3.99	5580 miles	2176 lbs/co2	🛒
<input type="checkbox"/>	Fresh Salmon	Norway	1 lb.	\$8.99	5327 miles	2080 lbs/co2	🛒
<input type="checkbox"/>	Organic Blueberries	New Zealand	4.4oz.	\$3.99	6012 miles	2540 lbs/co2	🛒

foodprint

transportation	lbs/co2
 =	0
 =	0
 =	342
 =	0



Did you know....

Local products might cost a few more cents, but the environmental impact can be significantly lowered by buying locally.




Your current shopping list:

+	Fuji Apple	Washington	1 apple	\$0.49	954 miles	429 lbs/co2
		California	1 apple	\$0.79	342 miles	215 lbs/co2
		New York	1 apple	\$0.39	2211 miles	862 lbs/co2
-	Nectarines	Chile	1 lb, 10oz.	\$3.99	5580 miles	2176 lbs/co2



[go to updated list](#)

foodprint

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A shopper can see other product options by expanding the original product



Click on the cart to choose a product to add to your list

[go to updated list](#)

foodprint

new shopping list:

Fuji apple	California	\$0.79/ea
Wild Caught Salmon	Alaska	\$14.99/lb
Nectarines	California	\$2.99/lb
Organic Blueberries	Oregon	\$4.99 (11 oz.)

total CO2: 1035 lbs
difference of: -6190 lbs

print