America's Wasted Food

An Overview for the CA State Board of Food & Agriculture

March 5, 2013

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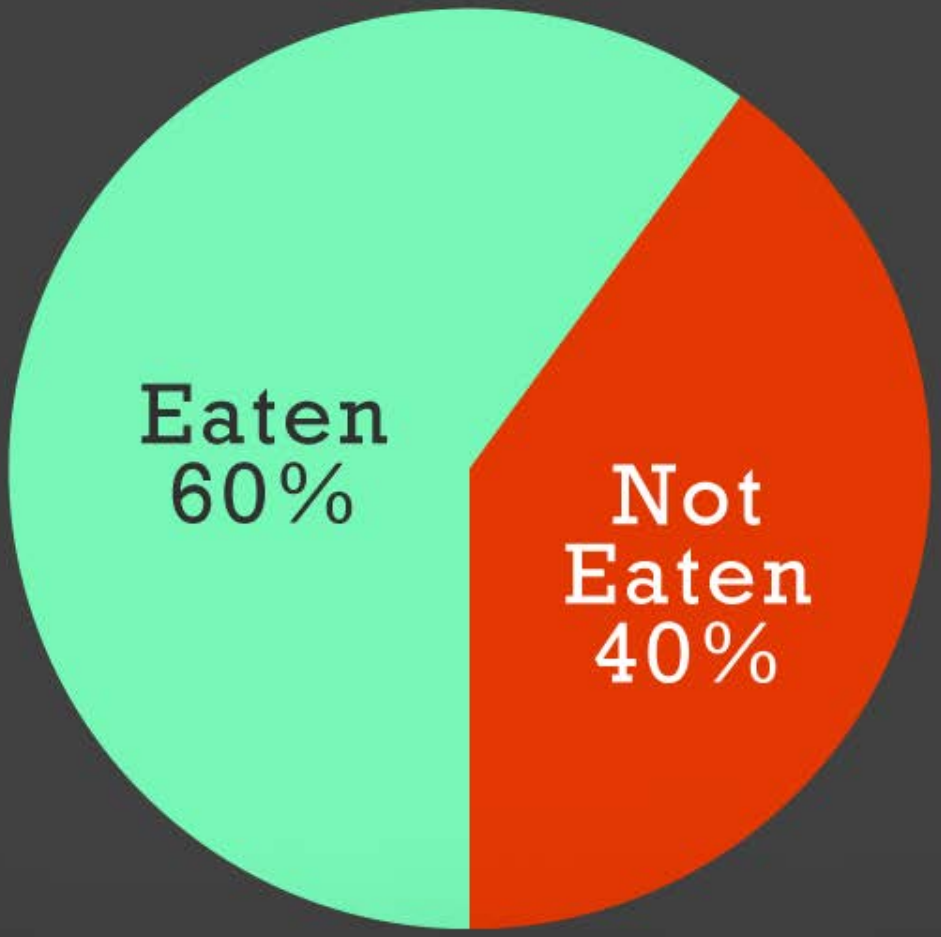
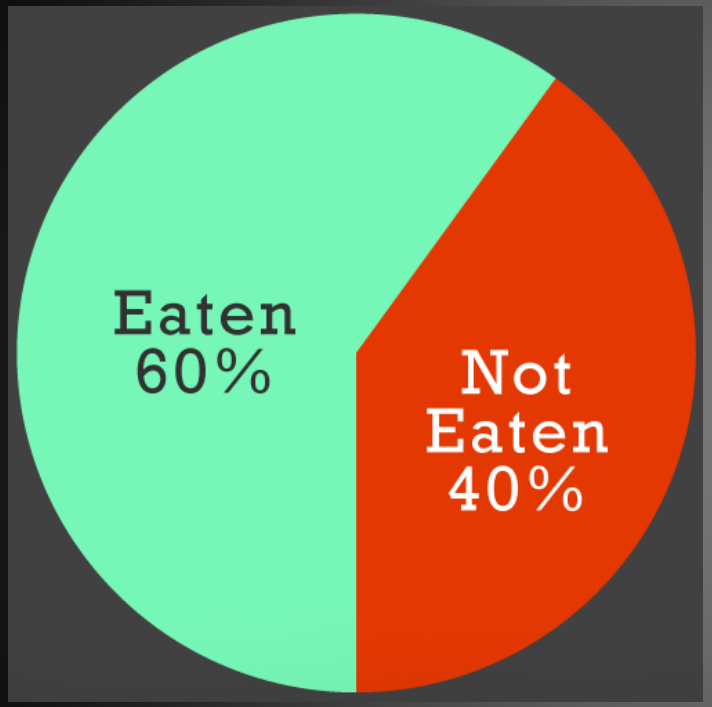
U.S. FOOD SUPPLY





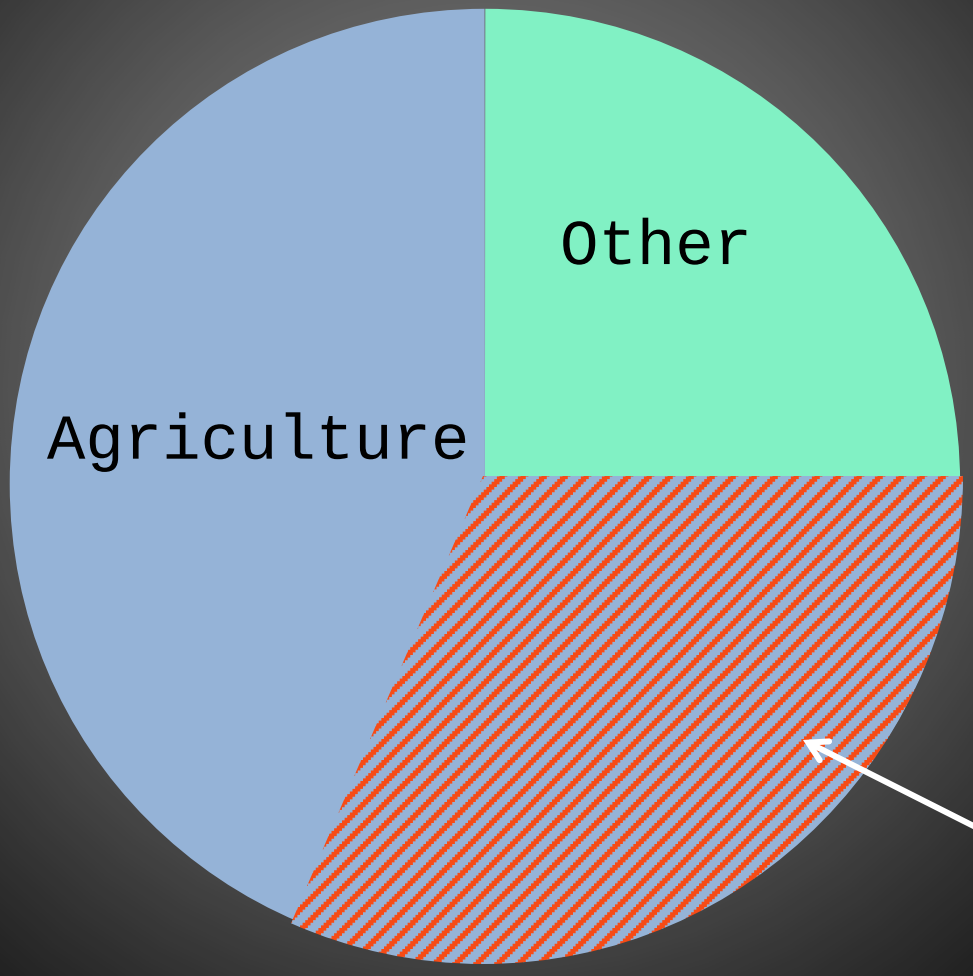
~25 % of U.S. water use

4% of U.S. oil

~15% of U.S. methane

Land use
Pesticide use
Water quality
GHG emissions

CA WATER USE

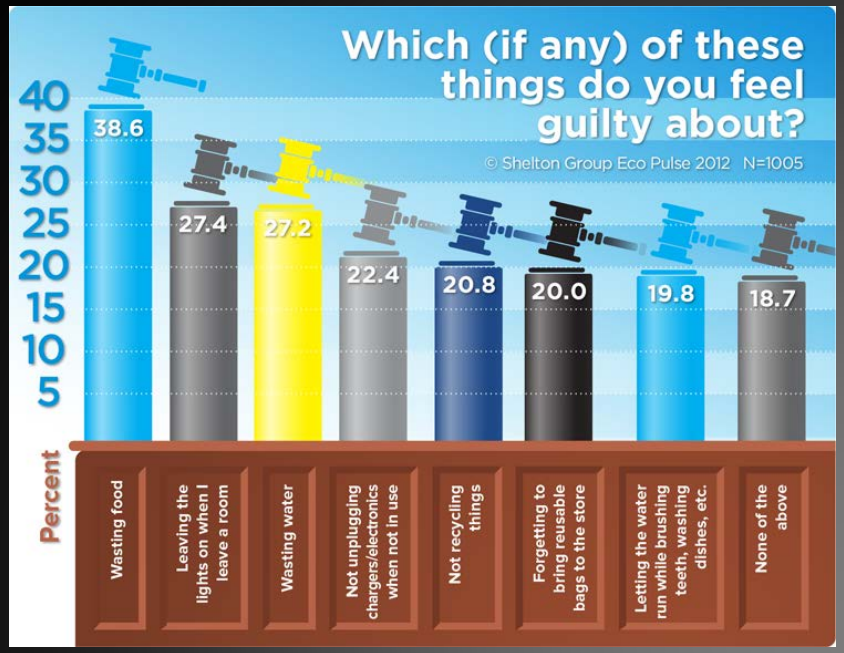


Water for uneaten food?

U.S. Food Supply
Food That's Eaten
Food Wasted By:
CONSUMERS
RESTAURANTS
GROCERY STORES
OTHER SOURCES
Just 15 percent less waste by consumers could feed 25 million people

FOR THE AVERAGE U.S. HOUSEHOLD OF FOUR, FOOD WASTE TRANSLATES INTO AN ESTIMATED $1,350 TO $2,275 IN ANNUAL LOSSES.

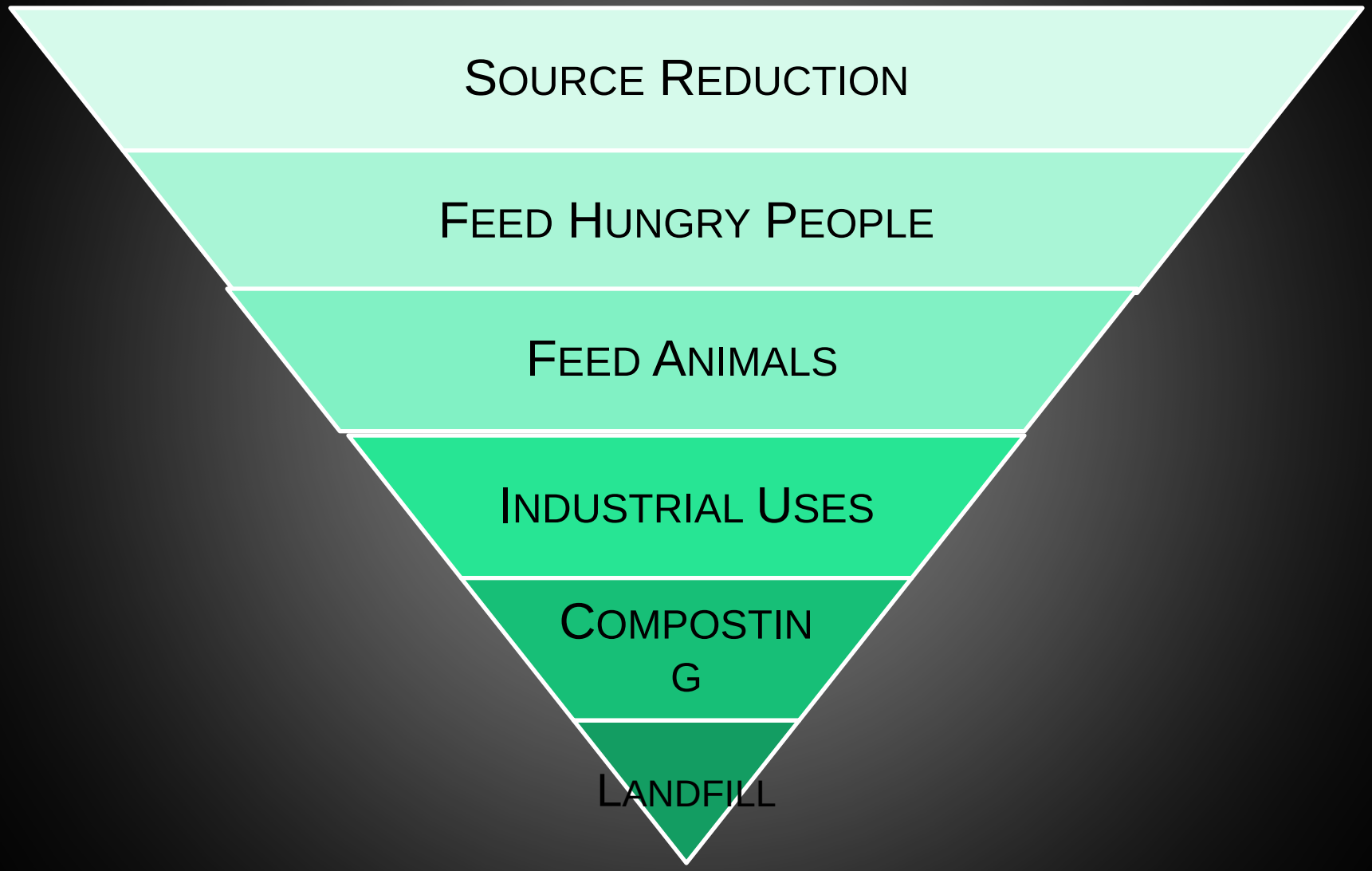
Source: Bloom, *American Wasteland*, 187. Another report using updated USDA consumer loss numbers and 2011 prices estimates $1,600 in annual losses per household of four: Clean Metrics, "The Climate Change and Economic Impacts of Food Waste in the United States," http://www.cleanmetrics.


Which (if any) of these things do you feel guilty about?
© Shelton Group Eco Pulse 2012 N=1005
Percent
40
35
30
25
20
15
10
5
38.6
27.4
27.2
22.4
20.8
20.0
19.8
18.7
Wasting food
Leaving the lights on when I leave a room
Wasting water
Not unplugging chargers/electronics when not in use
Not recycling things
Forgetting to bring reusable bags to the store
Letting the water run while brushing teeth, washing dishes, etc.
None of the above

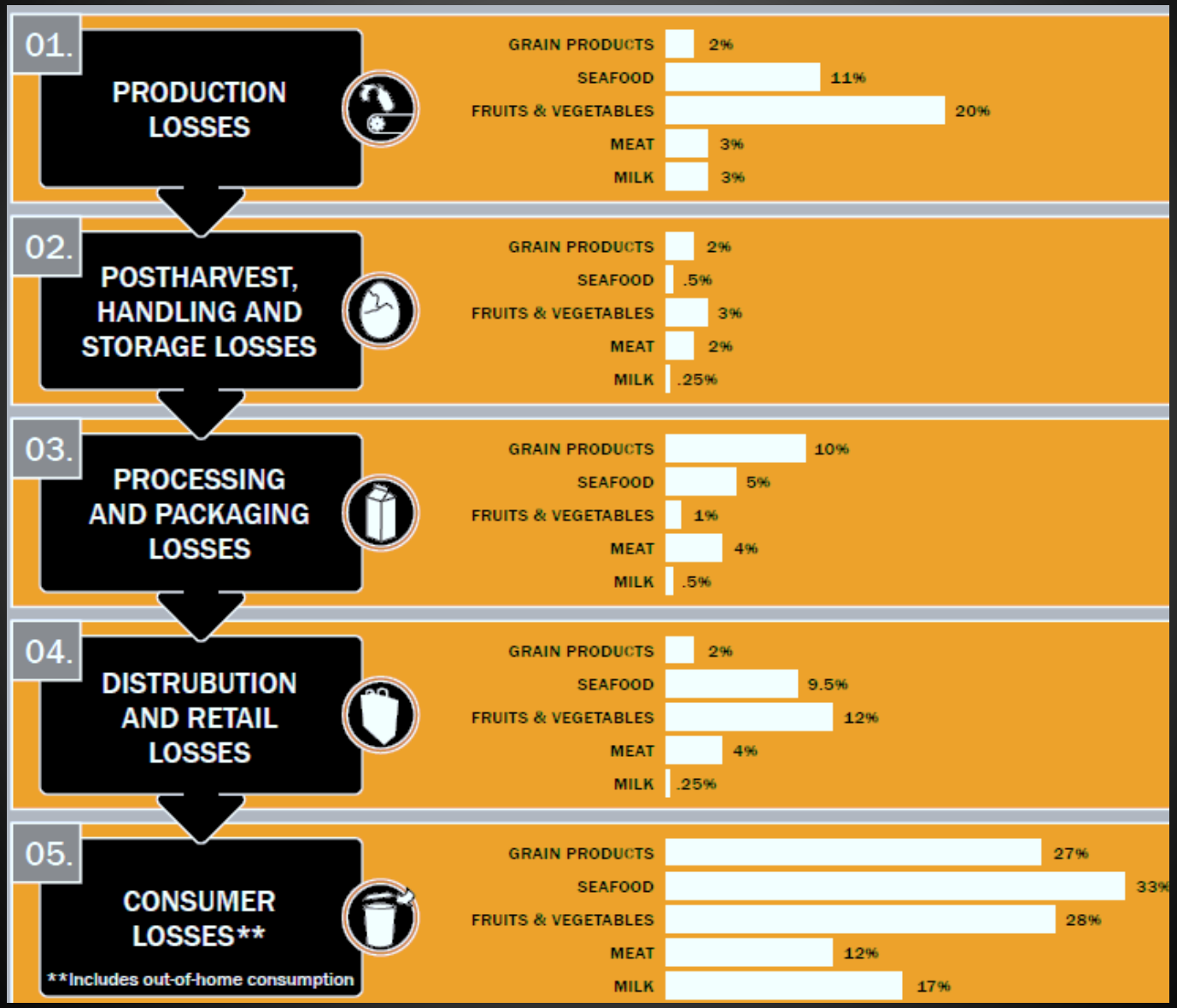
NRDC ISSUE PAPER
Wasted: How America Is Losing Up to 40 Percent of Its Food from Farm to Fork to Landfill

The New York Times
BBC MUNDO
TIME
CNN
npr
wire
San Francisco Chronicle
The Washington Post
Los Angeles Times
WALL STREET JOURNAL
The Christian Science Monitor
CNBC
FOX NEWS radio
science FRIDAY
SALON
Forbes
The Packer
ABC NEWS
YAHOO!
REUTERS

EPA FOOD WASTE HIERARCHY



LOSSES ALONG THE SUPPLY CHAIN



FARM LOSSES

CA CROP SHRINK SURVEY

What is driving crop losses?

- Overplanting
- Market fluctuation/low prices
- Labor shortages
- Product grading
- Anticipatory packing
- [Food safety]
- [Supply management]

CA CROP SHRINK SURVEY

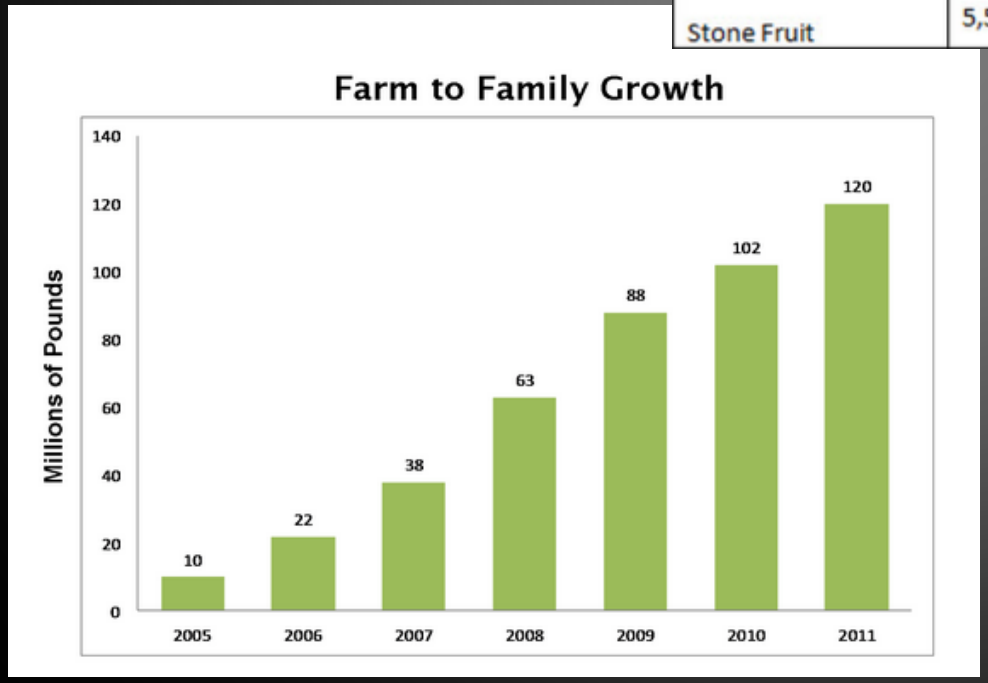
(small sample size)

Self-Reported Estimates from Producers for Pre-Harvest Shrink (% by weight of total available harvest)							
Type of Shrink	Low & High Estimates	Cherries	Pears	Plums	Head Lettuce	Nectarines	Broccoli
Pre-Harvest Shrink	Low	1%	5%	10%	3%	10%	5%
	High	20%	15%	30%	6%	30%	20%
In-Situ Shrink	Low	0%	0%	0%	1%	0%	1%
	High	0%	0%	0%	4%	0%	2%
Packing Culls	Low	2%	2%	2%	1%	No Data	No Data
	High	10%	30%	30%	4%	No Data	No Data

California Association of Food Banks

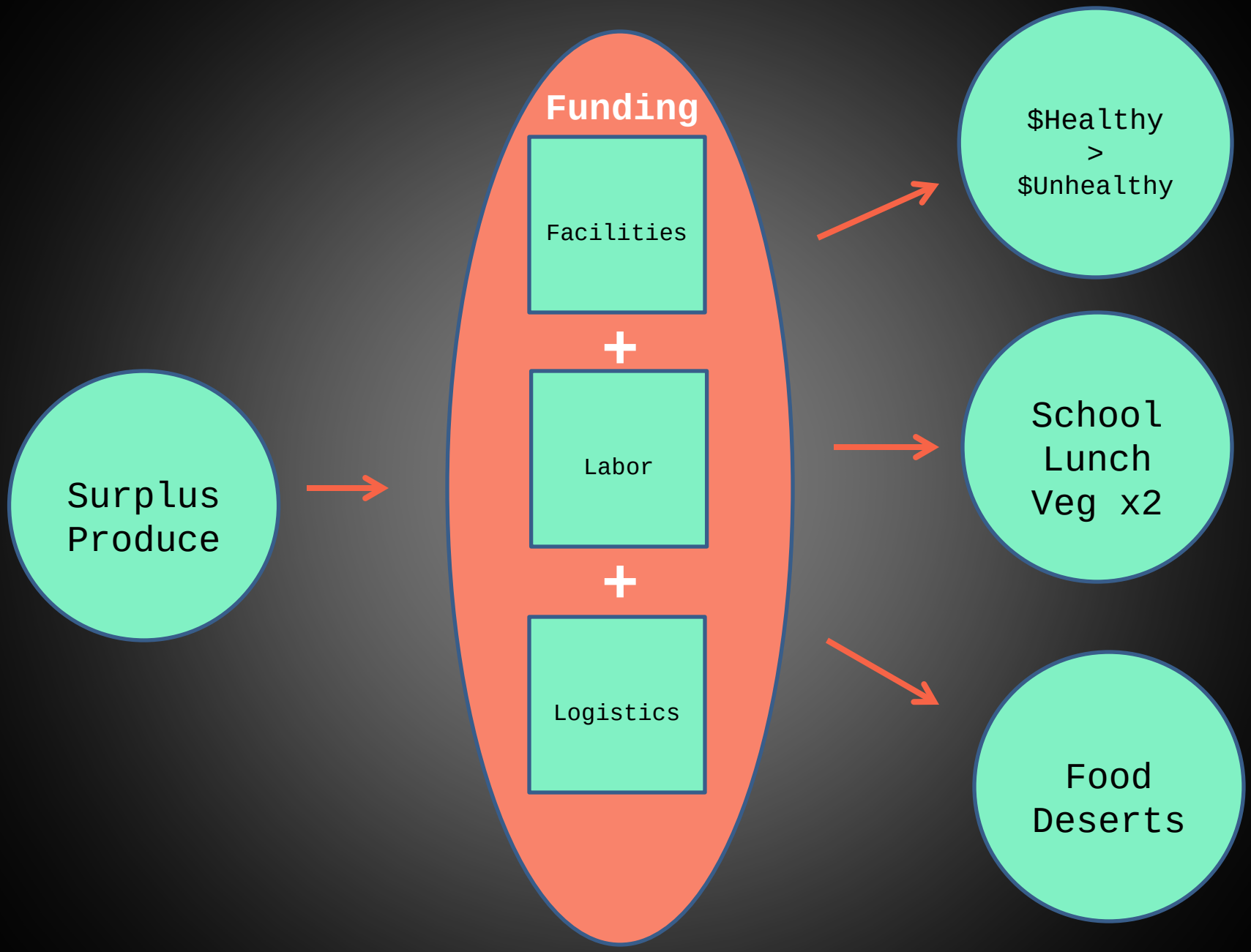
FARM TO FAMILY 2011 DISTRIBUTION
(partial list)

Type of Produce	Pounds Shipped	Type of Produce	Pounds Shipped
Potatoes	18,514,526	Pears	5,561,918
Onions	14,668,821	Sweet Potatoes	4,731,476
Oranges	12,032,490	Cantaloupes	4,608,100
Cabbage	9,584,220	Celery	3,425,488
Carrots	7,579,691	Broccoli/Cauliflower	4,266,128
Apples	6,718,892	Corn	2,397,810
Watermelons	6,014,858	Tomatoes	2,195,362
Stone Fruit	5,582,002	Winter Squash	1,117,464



"We are proud to report that in our first season, we gleaned more than 5,000 lbs. of food and produced 1,400 lbs. of frozen tomato sauce and vegetables for the freezer that will feed 2,500 people in our community throughout the year."

Andronico's
COMMUNITY MARKETS


Surplus Produce
Funding
Facilities
+
Labor
+
Logistics
$Healthy > $Unhealthy
School Lunch Veg x2
Food Deserts

CA CROP SHRINK SURVEY

What is driving crop losses?

- Overplanting
- Low market prices
- Labor shortages
- Product grading
- Anticipatory packing
- [Food safety]
- [Supply management]

RETAIL LOSSES

RETAIL LOSS DRIVERS

IN-STORE

- Ensuring stocked shelves/displays
- High variety
- Pack sizes
- Low staffing
- Handling
- Sell-by dates

BEYOND-STORE

- Upstream
  - Return privileges
  - Specifications
  - Contract demands/ expectations
- Downstream
  - Impulse buys
  - Bulk buys
  - Promotions

FOOD SERVICE LOSSES

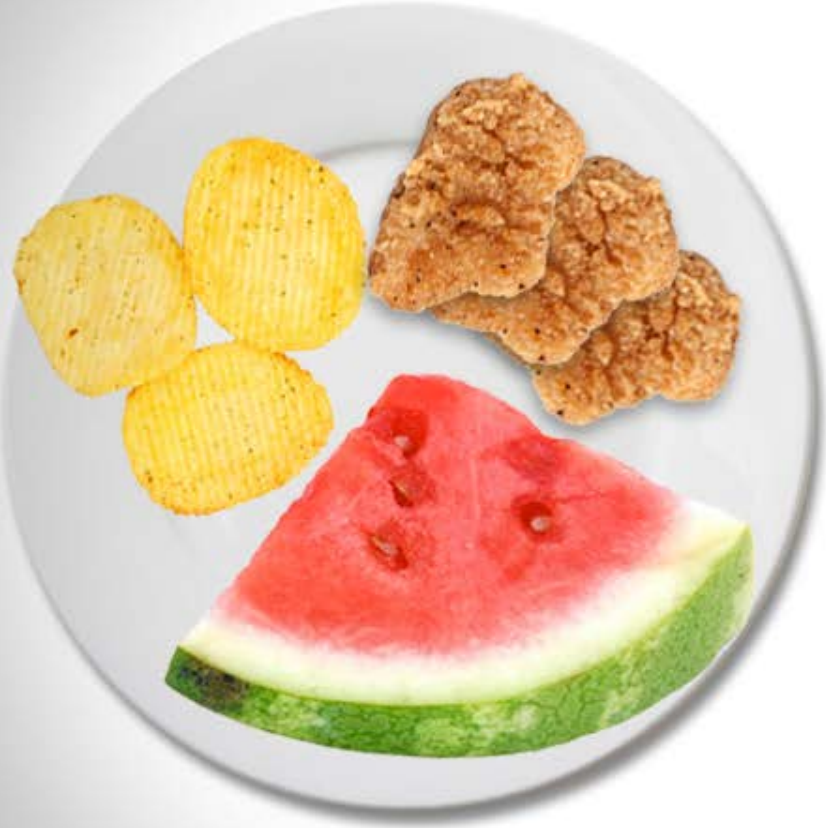
FOOD SERVICE LOSS DRIVERS

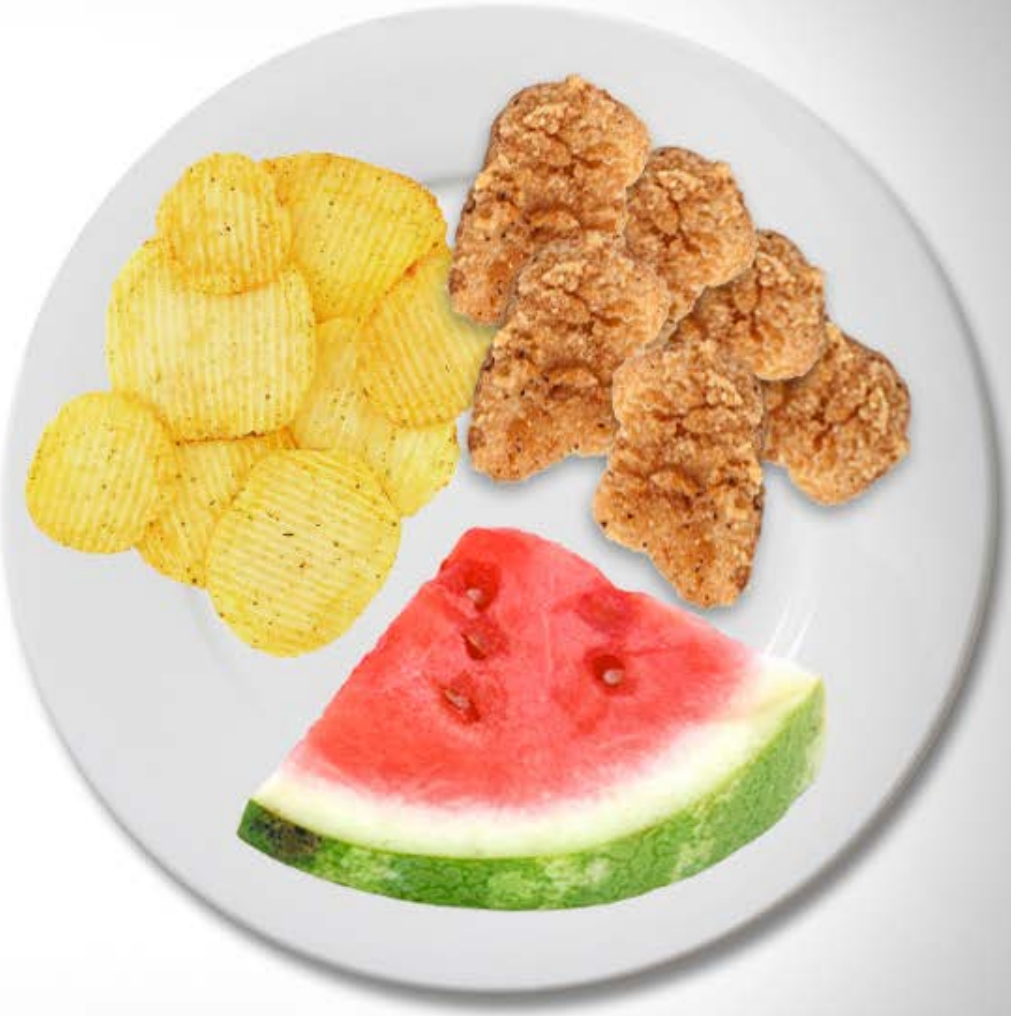
- Large portions
- Extensive menus
- Inflexible management (chains)
- Unpredictable consumption
- Kitchen culture
- Donations challenging
  - enhanced tax deduction only for C-Corps

CONSUMER LOSSES

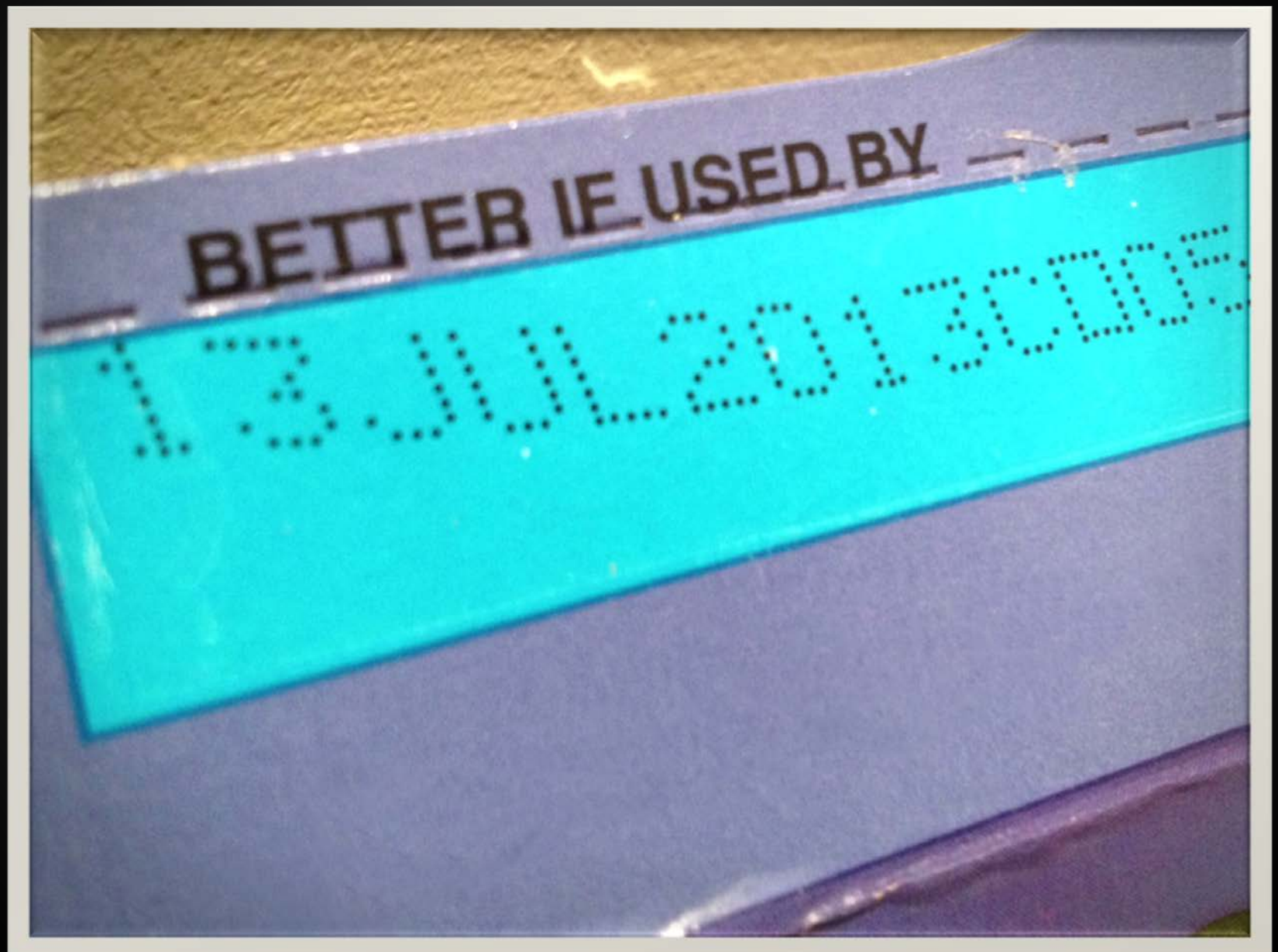
FOOD HABITS

PORTION SIZES





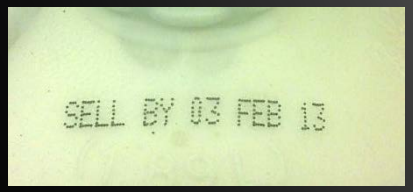
EXPIRATION DATES



SAME TRADER JOE'S STORE

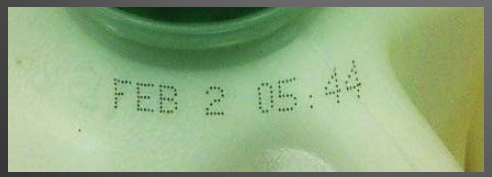
Organic 2%
½ gallon

"Sell By"



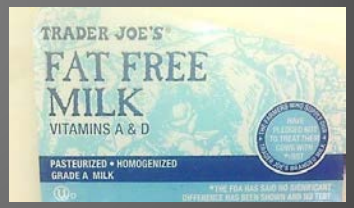
Organic 2%
gallon

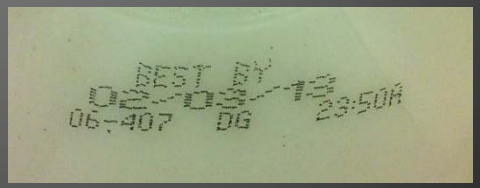
Date only,
no words



Fat free
½ gallon

"Best By"





Fat free
quart

Date only,
no words

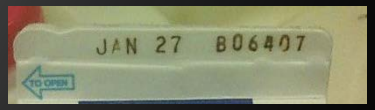


TABLE 56: CONSUMER ACTIONS TO KEEP FOOD SAFE

Q: Now we have some questions on how you handle or prepare foods. Please indicate how frequently you do each of the following.

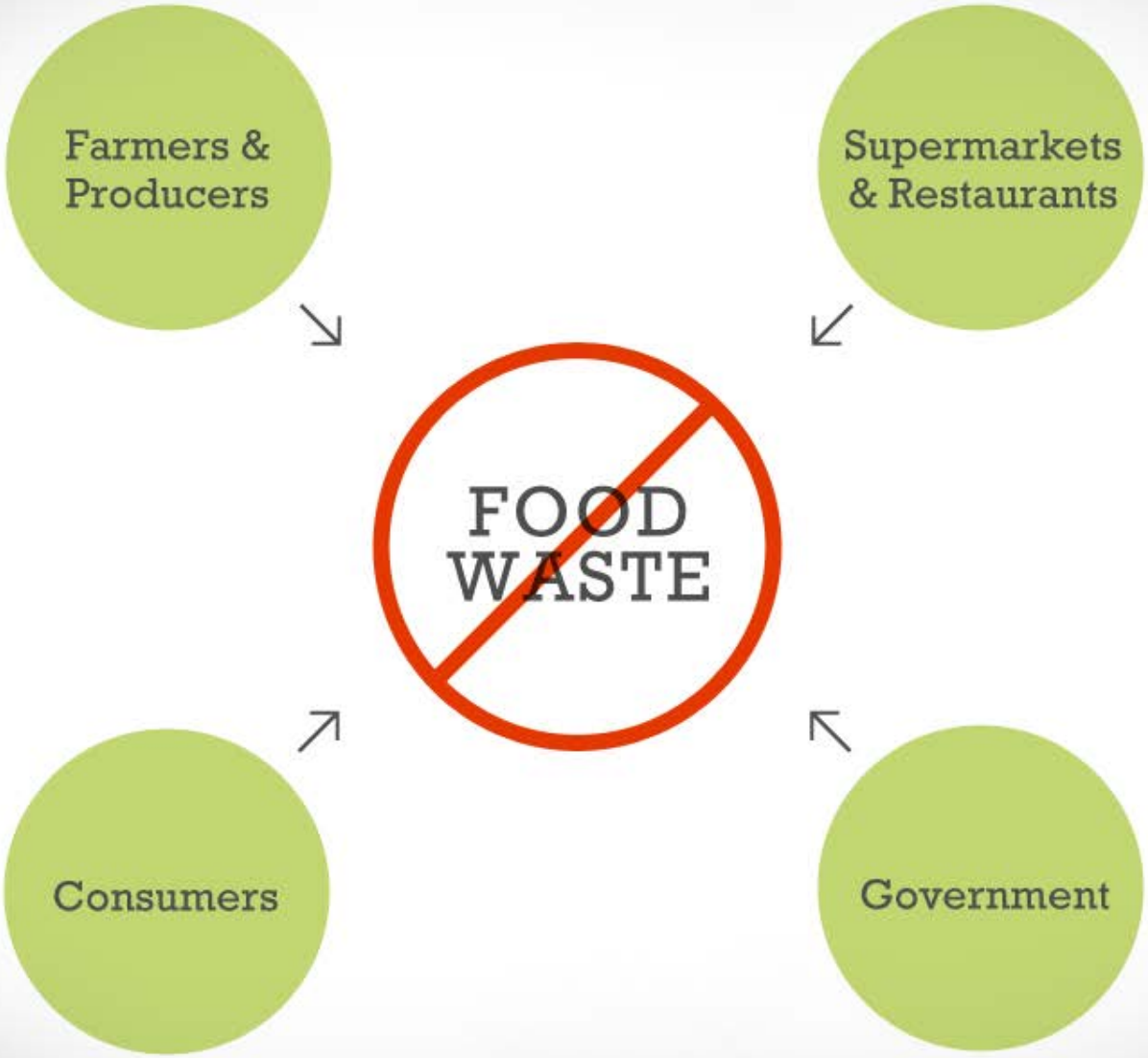
Number of shoppers: 1,026	2011				Every Time		
	Never	Occasionally	Fairly Often	Every Time	2010	2009	2008
Wash hands after handling meat	1%	4%	11%	84%	N/A	N/A	N/A
Keep area free of pests and insects	1	4	13	83	79%	80%	81%
Refrigerate promptly (within two hours)	*	4	15	80	78	74	78
Wash hands before handling meat	1	7	17	75	76	77	75
Keep raw meats and poultry separate to avoid cross-contamination	2	7	17	73	56	52	51
Use a store-bought produce or vegetable wash	7	9	11	73	13	8	9
Wash vegetables	1	6	21	72	76	74	76
Use antibacterial soaps	6	19	33	42	46	44	45
Discard food past "use-by" date	5	25	33	37	39	37	44
Thaw meat in the refrigerator	5	22	43	30	31	33	32
Cook to proper temperatures by using a food thermometer	27	22	26	26	33	28	30
Discard food past "sell-by" date	9	31	34	25	32	27	34
Discard food past "best-by" date	9	33	37	22	N/A	N/A	N/A

Source: Food Marketing Institute U.S. Grocery Shopper Trends 2011

TECHNOLOGY

RECOMMENDATIONS

- Spread word on AB152
- Set targets
- Conduct representative study to better understand extent, drivers, and impacts.
- Food waste prevention focus area for Specialty Crop Block Grant
  - connect the dots between surplus production and need for low cost, nutritious foods.
  - encourage measurement by businesses
  - raise consumers awareness
- Grading standard adjustments/flexibility


Farmers & Producers
Supermarkets & Restaurants
FOOD WASTE
Consumers
Government