



Cornell University
Charles H. Dyson School of
Applied Economics and Management



Consumer Trends Driving Produce Consumption



Rod Hawkes

Senior Extension Associate

Food Industry Management Program

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QUIZ

Percent of U.S. households that buy produce?

100%

Per capita TOTAL VEGETABLE consumption as % of USDA guideline?

Per capita TOTAL FRUIT consumption as % of USDA guideline?

Annual per capita FRESH FRUIT “eatings”?

Annual per capita FRESH VEGETABLE “eatings”?

Percent of New Yorkers who are obese?

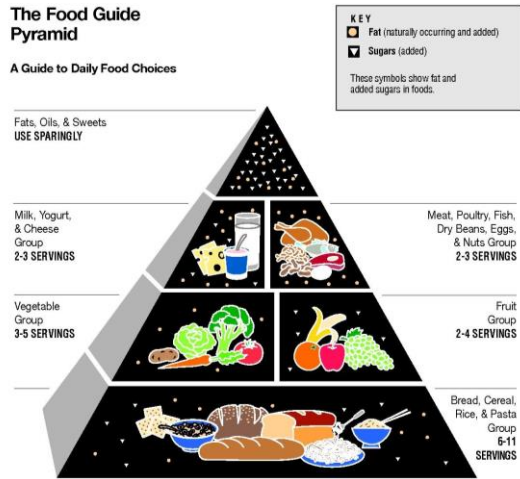


Consumer Trends

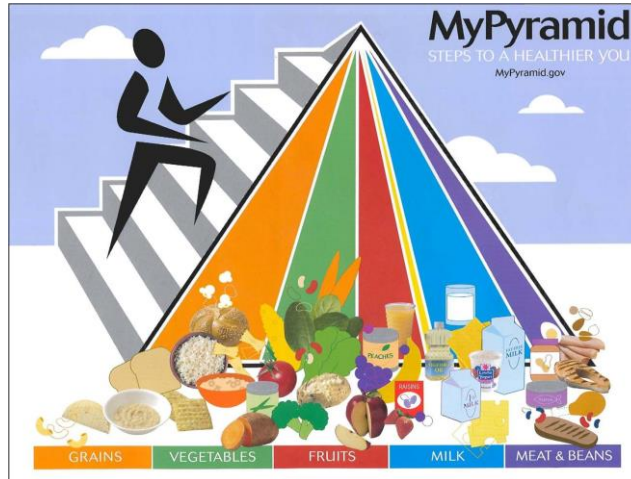
- **Produce consumption**
 - **Obesity & overall health**
 - **Aging population**
 - **Smaller households**
 - **Ethnic diversity**
 - **Sustainability and food sources**
 - **Complex lives and time pressure**



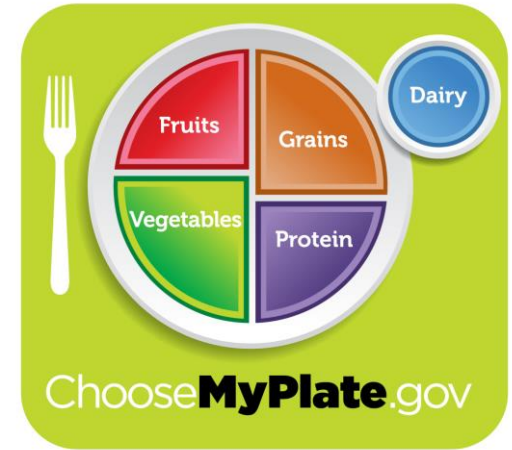
Consumption Obesity Aging Smaller Households Diversity Sustainability Complex Lives



1992



2005



2011

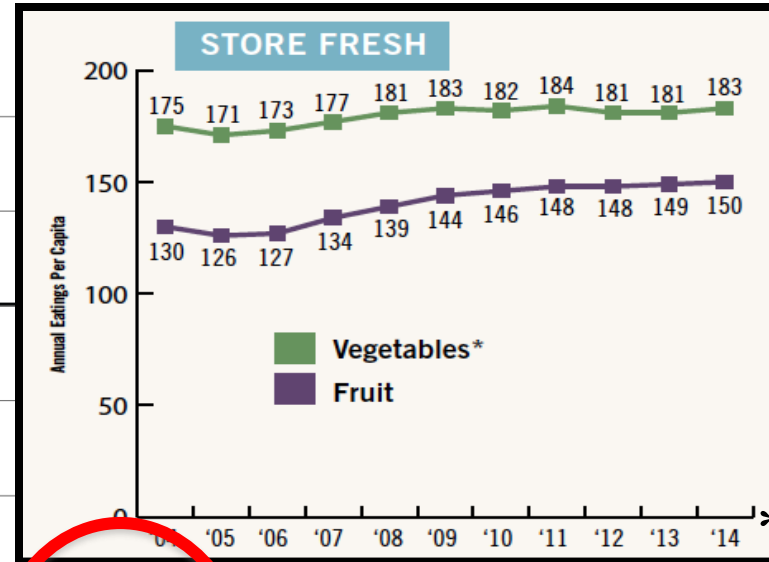
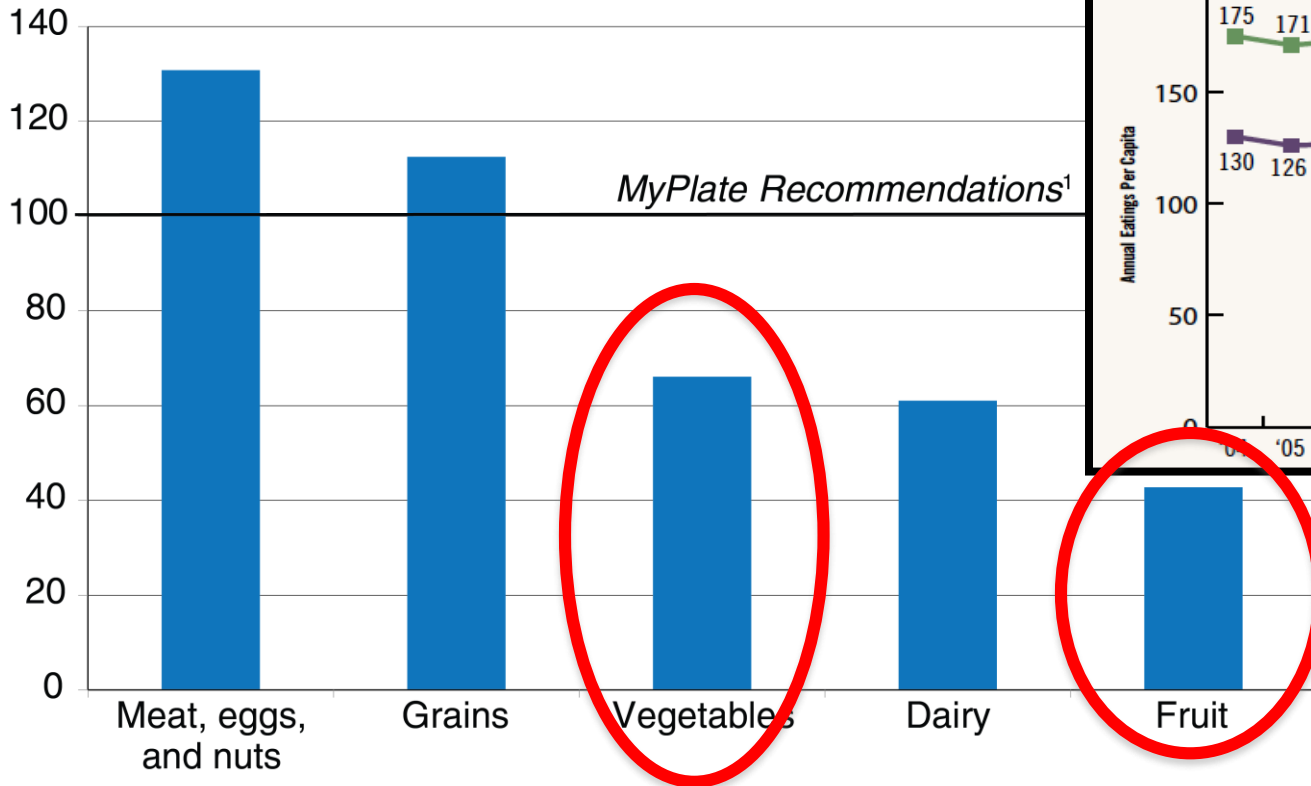


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Average U.S. consumption compared to recommendations, 2013

Percent of MyPlate recommendation



Note: Rice data were discontinued and thus are not included in the grains group.

¹Based on a 2,000-calorie diet.

Source: USDA, Economic Research Service, Loss-Adjusted Food Availability Data.

* Source: Produce For Better Health (PBH), "State of the Plate: 2015 Study of America's Consumption of Fruit and Vegetables"



Guiding Stars®

Nutritious choices made simple™



Nutrition Facts

Serving Size 172 g

Amount Per Serving

Calories 200 **Calories from Fat** 8

% Daily Value*

Total Fat 1g 1%

Saturated Fat 0g 1%

Trans Fat

Cholesterol 0mg 0%

Sodium 7mg 0%

Total Carbohydrate 36g 12%

Dietary Fiber 11g 45%

Sugars 6g

Protein 13g

Vitamin A 1% • Vitamin C 1%

Calcium 4% • Iron 24%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.



8
NuVal™



87
NuVal™



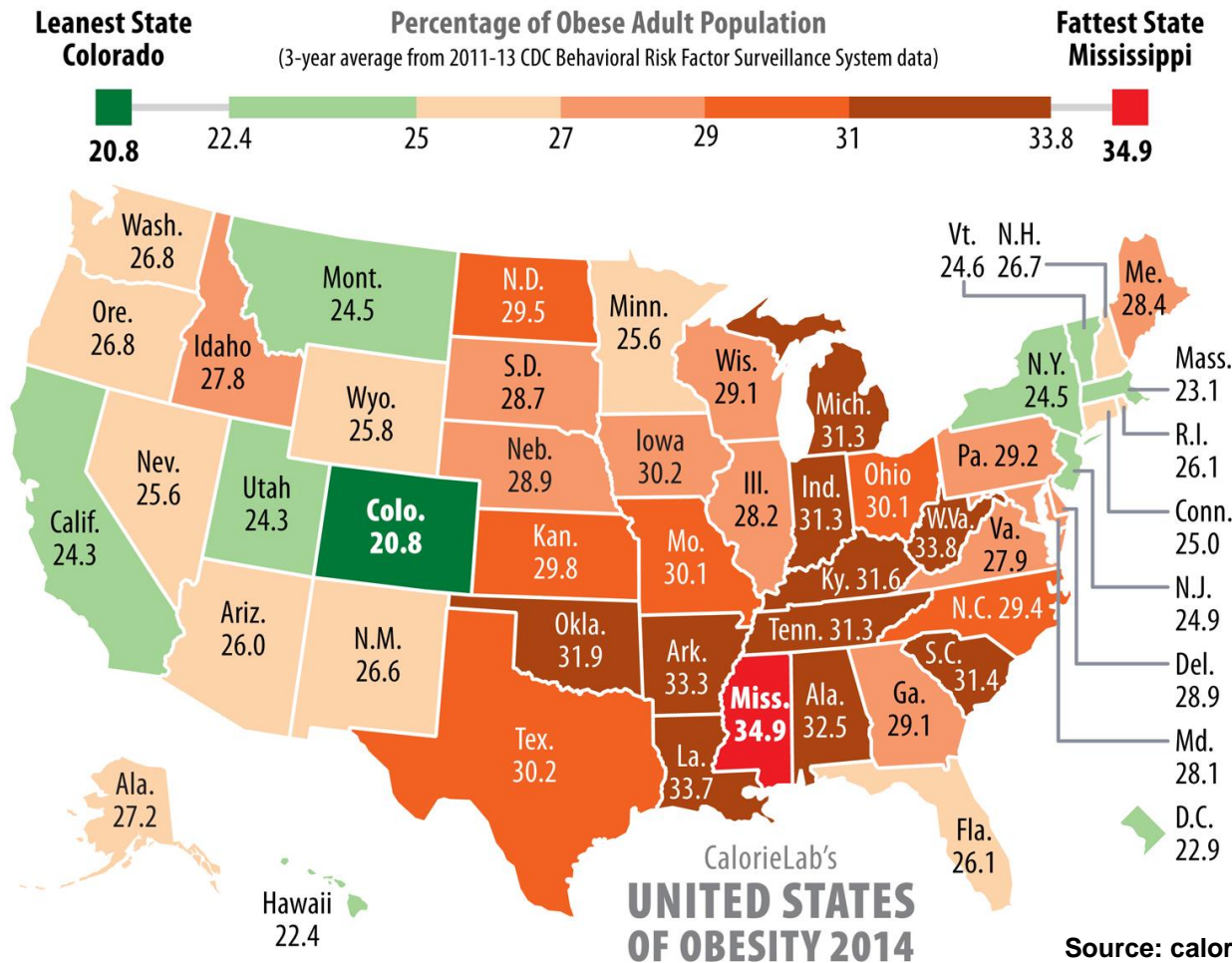
100
NuVal™



Consumption **Obesity** Aging Smaller Households Diversity Sustainability Complex Lives

“US obesity rates rising for first time since 2004”

Source: bbc.com/news/world-us-canada

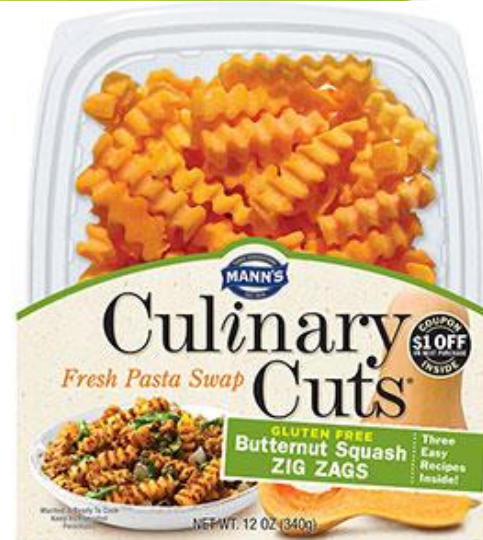


2014-15
Average:
38%

Source: calorielab.com/news/2015/10/31/fattest-states-2015/



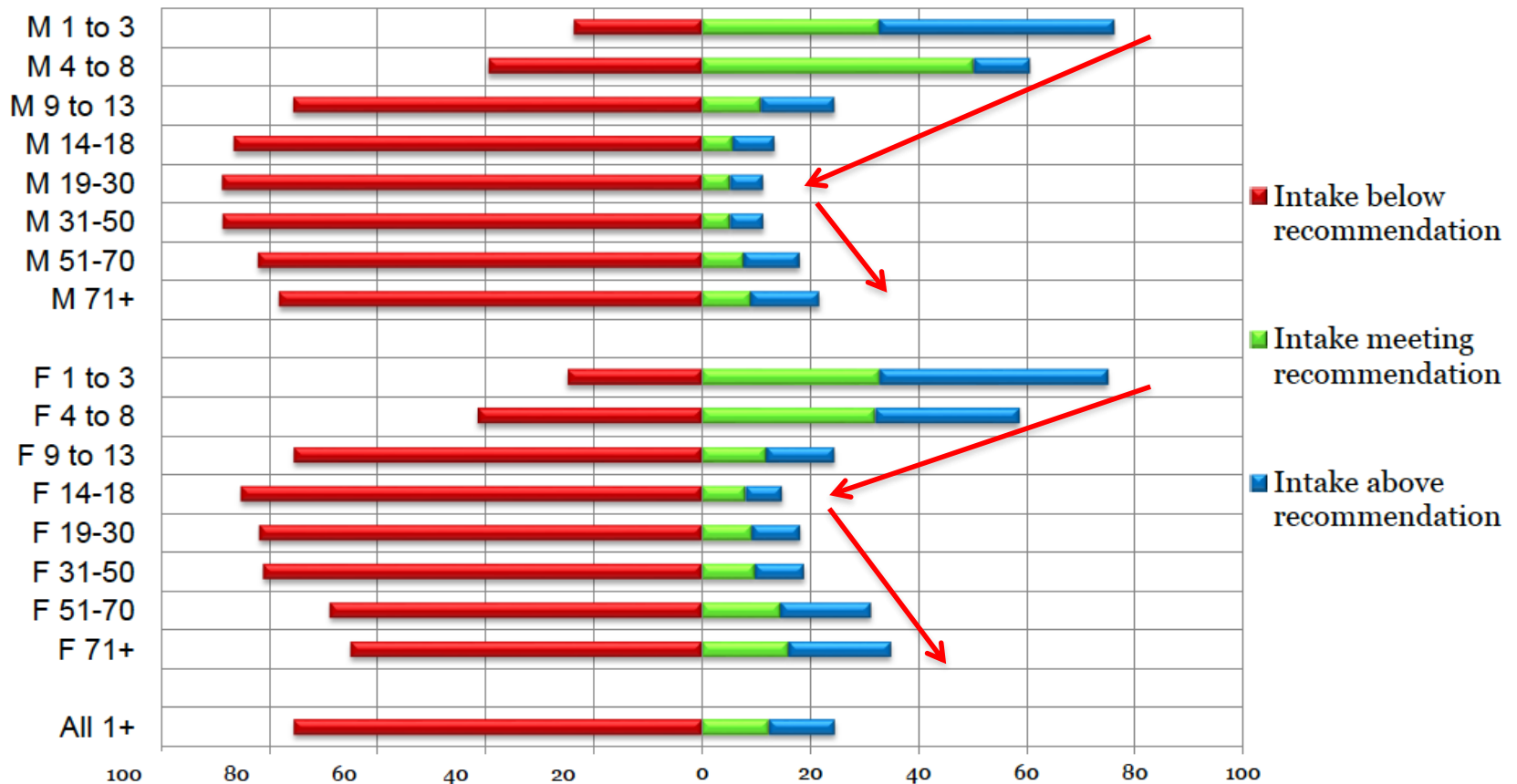
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Total Fruits

Estimated percentage of persons below, at, or above recommendation



% below recommendation

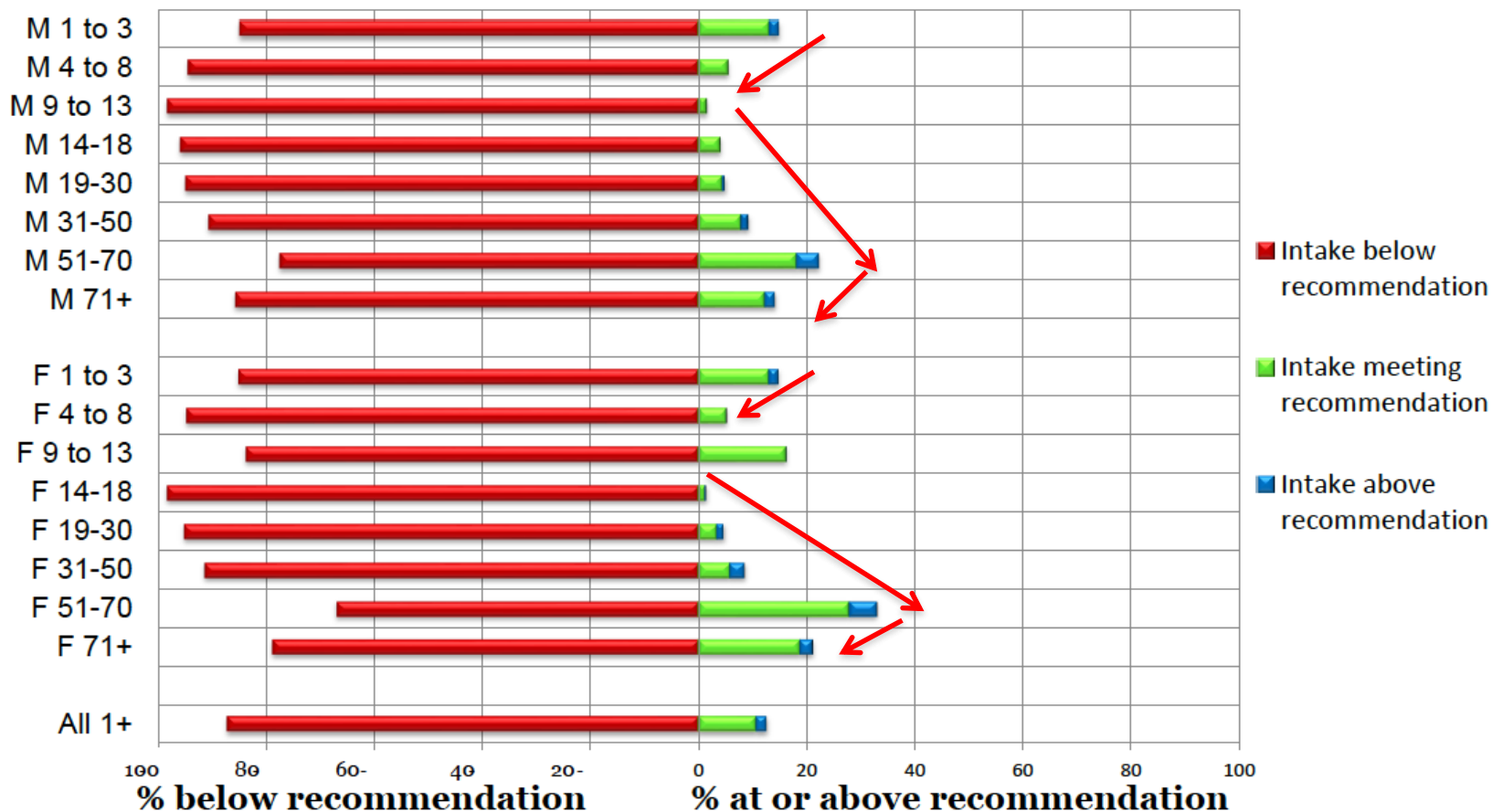
% at or above recommendation



2015 DGAC: MEETING 4

Total Vegetables

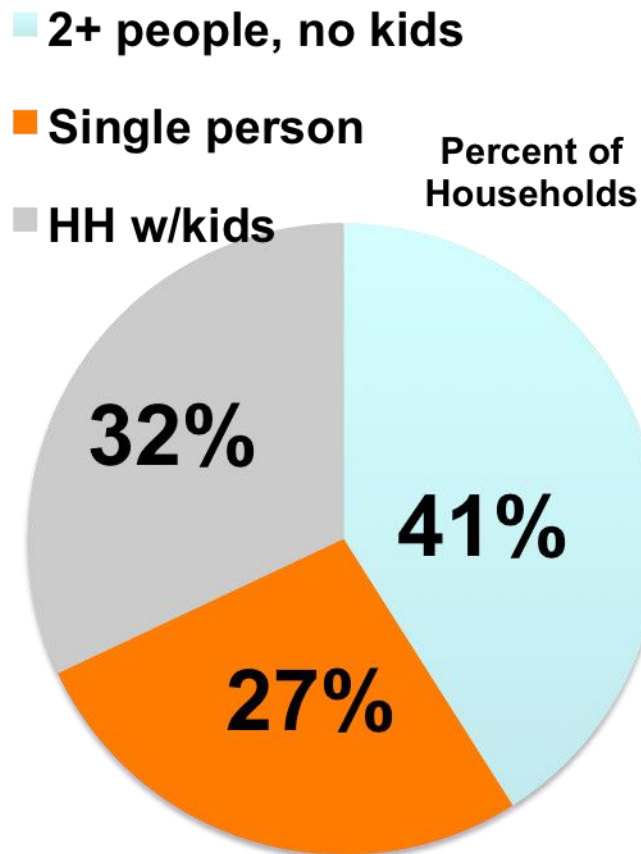
Estimated percentage of persons below, at, or above recommendation



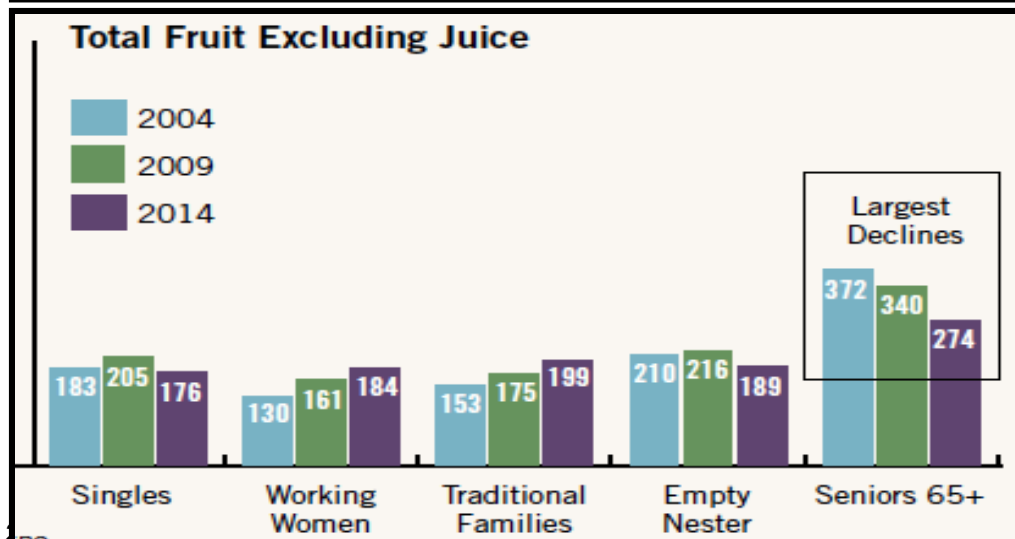
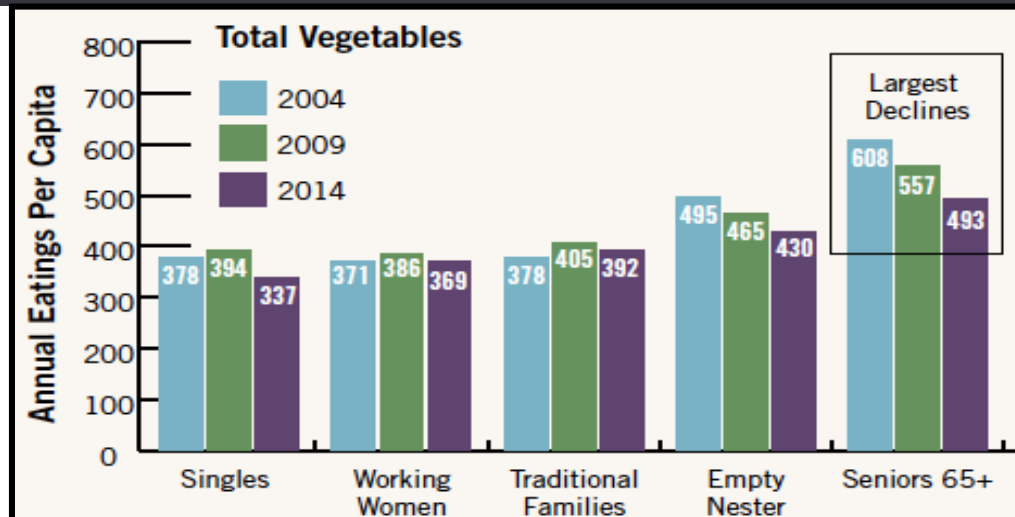


Consumption Obesity **Aging** Smaller Households Diversity Sustainability Complex Lives





68% = No Kids



Source: Data from presentation at FMI Midwinter Conference, January 2012, based on the research report titled "Reframing Retail through the Lens of Changing Food Culture," Daymon Worldwide and Hartman Group, 2012.

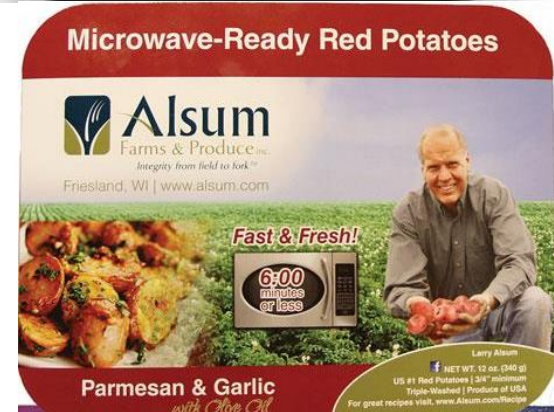
Source: Produce For Better Health (PBH), "State of the Plate: 2015 Study of America's Consumption of Fruit and Vegetables"



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DYSON SCHOOL AGRICULTURAL AND FOOD BUSINESS
OUTLOOK

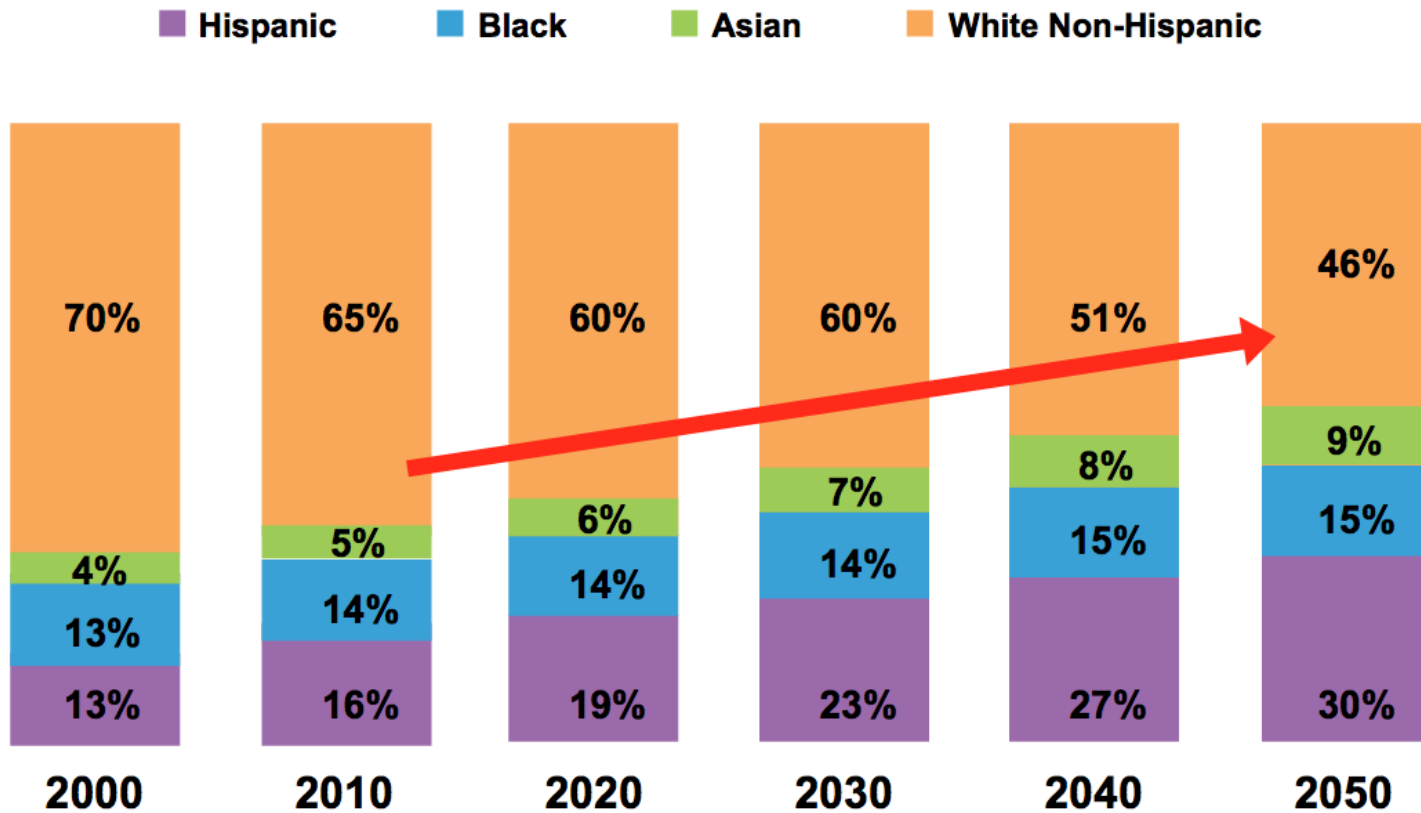
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Non-white Households will be Majority by 2050

Distribution of the U.S. Population





Consumption Obesity Aging Smaller Households **Diversity** Sustainability Complex Lives

Distinct ethnic cuisines co-mingle in cross-cultural cuisine



Peruvian & Japanese



Mexican & Korean

Experimentation drives food diversity



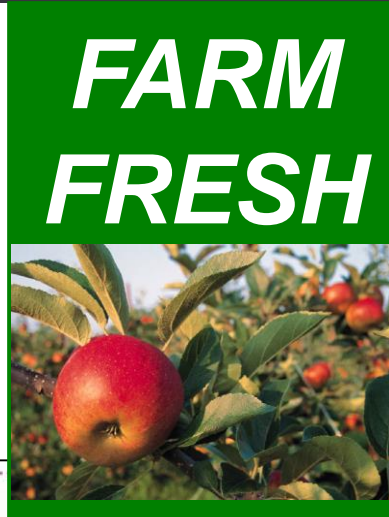
Texas Style BBQ and Thai



Korean BBQ, Vietnamese, & Mexican



Soul & Mexican



EWG'S 2015 **Dirty DOZEN**™
Shopper's Guide to Pesticides in Produce™

APPLES	PEACHES	ASPARAGUS	MANGOES
CELERY	POTATOES	AVOCADOS	ONIONS
CHERRY TOMATOES	SNAP PEAS	CABBAGE	PAPAYAS
CUCUMBERS	SPINACH	CANTALOUPE	PINEAPPLES
GRAPES	STRAWBERRIES	CAULIFLOWER	SWEET CORN
NECTARINES	SWEET BELL PEPPERS	EGGPLANT	SWEET PEAS (FROZEN)
		GRAPEFRUIT	SWEET POTATOES
		KIWI	

EWG'S 2015 **Clean FIFTEEN**™
Shopper's Guide to Pesticides in Produce™

⊕ HOT PEPPERS & KALE/COLLARD GREENS



vs

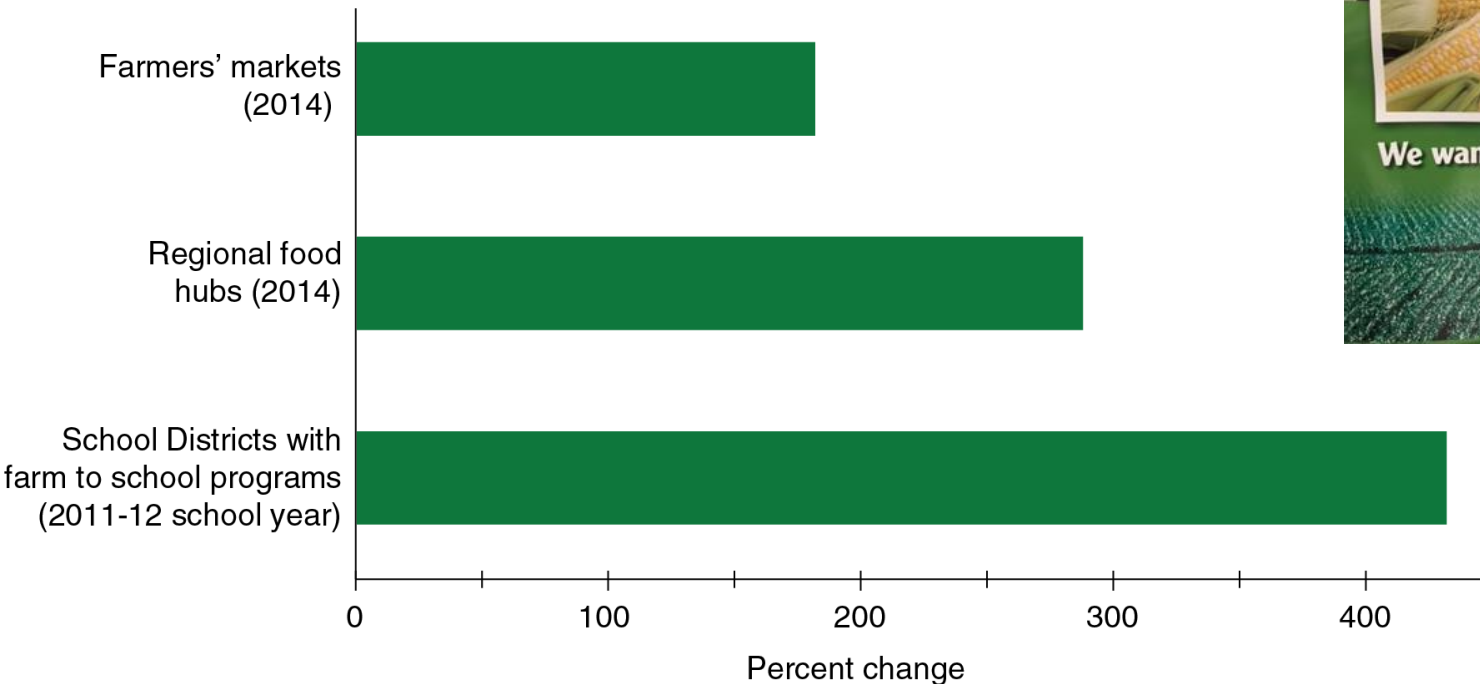




Competition for Sourcing Local Produce

Increase in local & regional marketing channels

Since 2007, growth in--





Imperfect Revolution Rising...



<https://vimeo.com/98441820>

<https://www.youtube.com/watch?v=lqY6qTCetsg>



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Takeaways...

- **Increasing pressure to address obesity & overall health**
- **Aging consumers, singles, and smaller will shape produce demand**
- **Accelerating ethnic diversity of consumers and food preferences**
- **Potential “permanent” value shopping mentality due to ongoing economic stresses**
- **Growing awareness, concern, and confusion about sustainability and food safety**
- **Less time for shopping, decision-making, and food preparation due to complex lives and time pressure**



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THANK YOU!!!

Rod Hawkes

Senior Extension Associate

Food Industry Management Program

rod.hawkes@cornell.edu

607-255-7939