Consumer Trends and Implications for Ohio Agriculture

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THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

What do consumers care about?

Price – Can I afford it?

Taste – Do I like it?

Convenience – Can I prepare it quickly and easily?

Health + Wellness – Is it good for me and my family?

Values – Is it produced in a way that aligns with my values?

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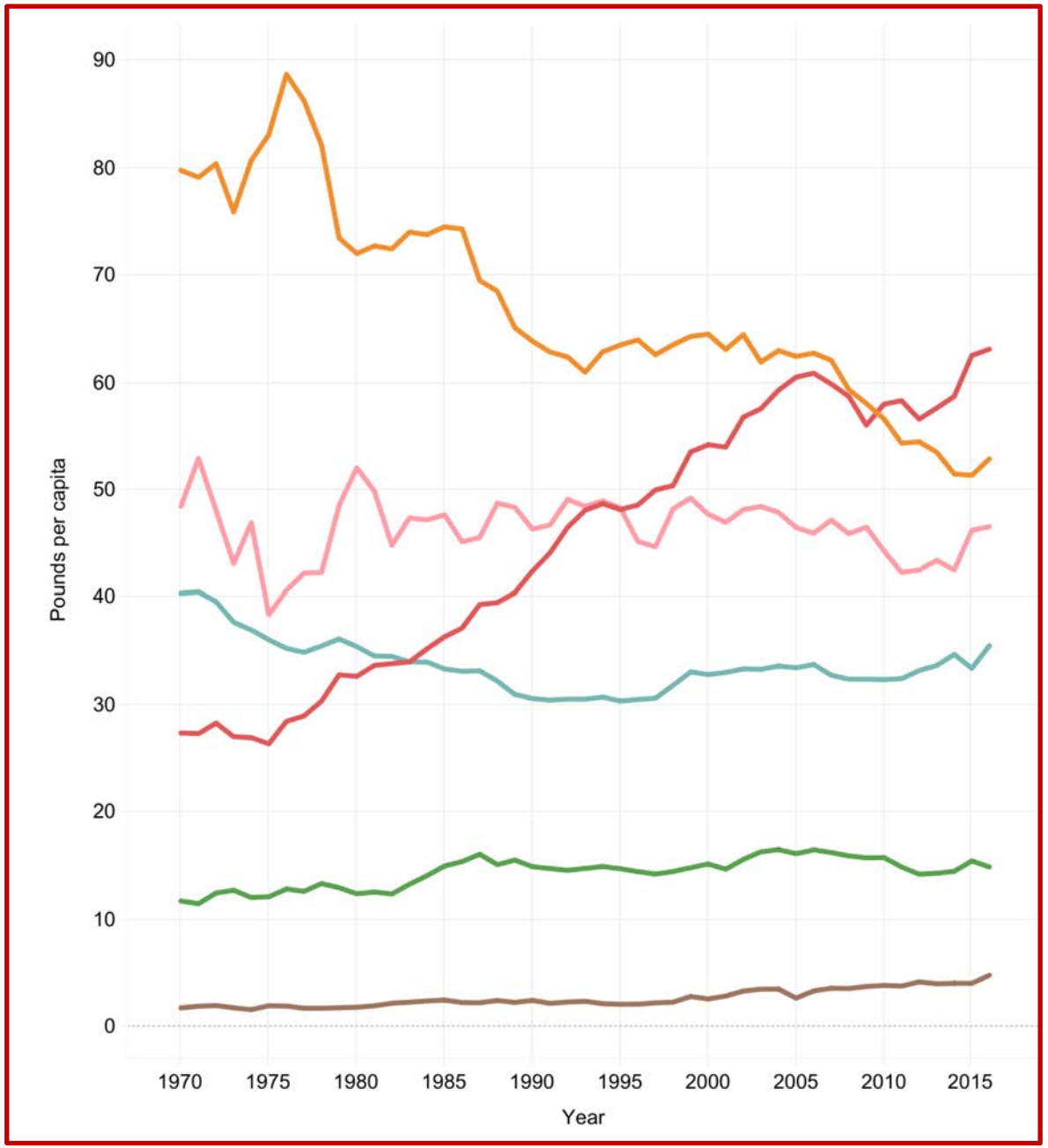
What are consumers buying?

Proteins

Per Capita Availability

- Beef availability has decreased
- Chicken availability has increased
- Tree nuts have grown in availability but remain a small share of all protein
- Not shown: Meat substitutes still small share but growing



Source: USDA Economic Research Service

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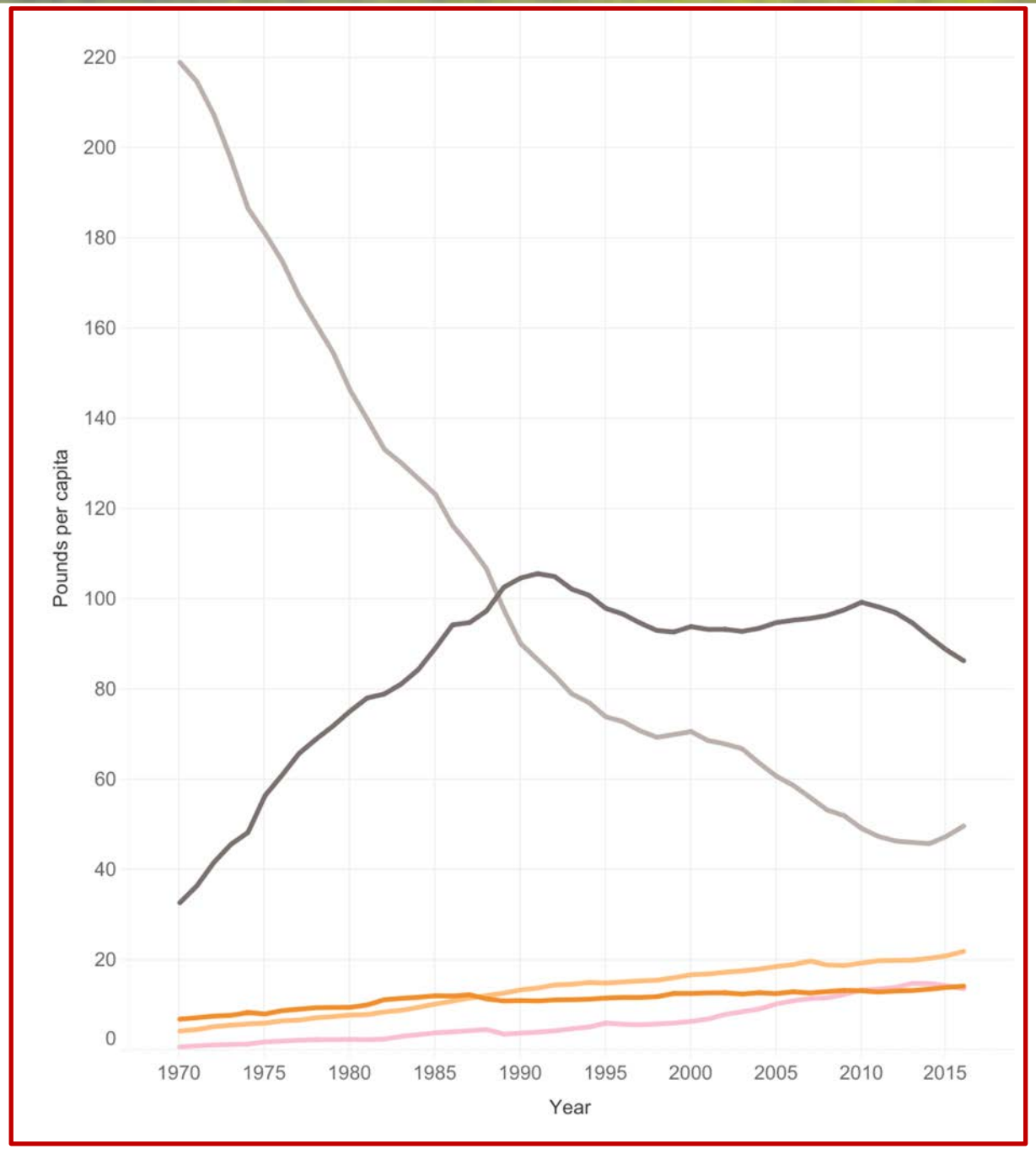
Dairy Products

Per Capita Availability

- Milk availability has decreased
- Lowfat milk has overtaken whole milk
- Yogurt and cheese have grown
- Not shown: Non-dairy milk substitutes still small share of total but seeing strong growth



Source: USDA Economic Research Service

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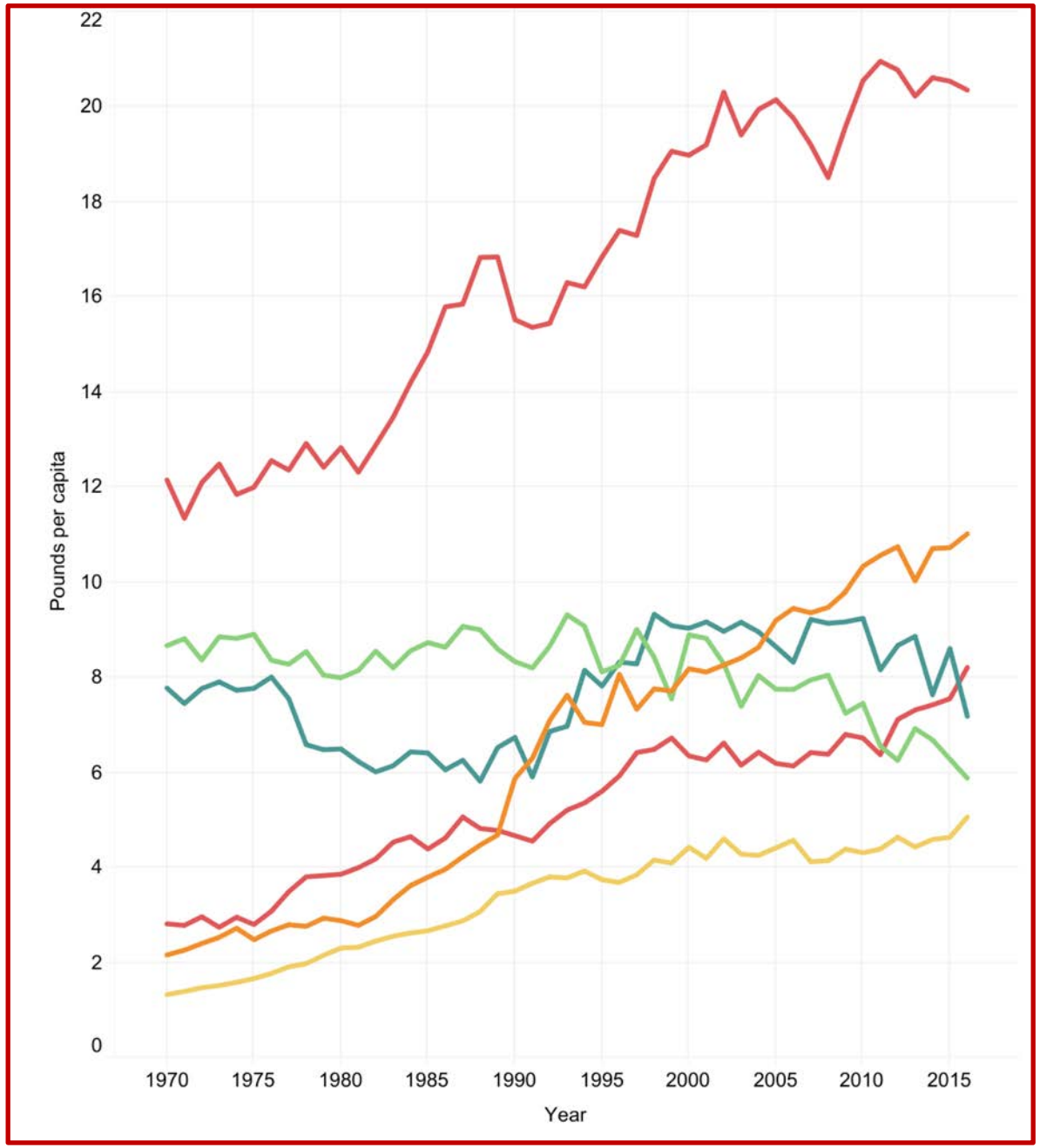
Fresh Vegetables

Per Capita Availability

- Tomato, bell pepper, cucumber and squash all mostly increasing
- Cabbage and sweet corn plateaued or decreasing
- Not shown: Potato still on top but large decline in availability over time



Source: USDA Economic Research Service

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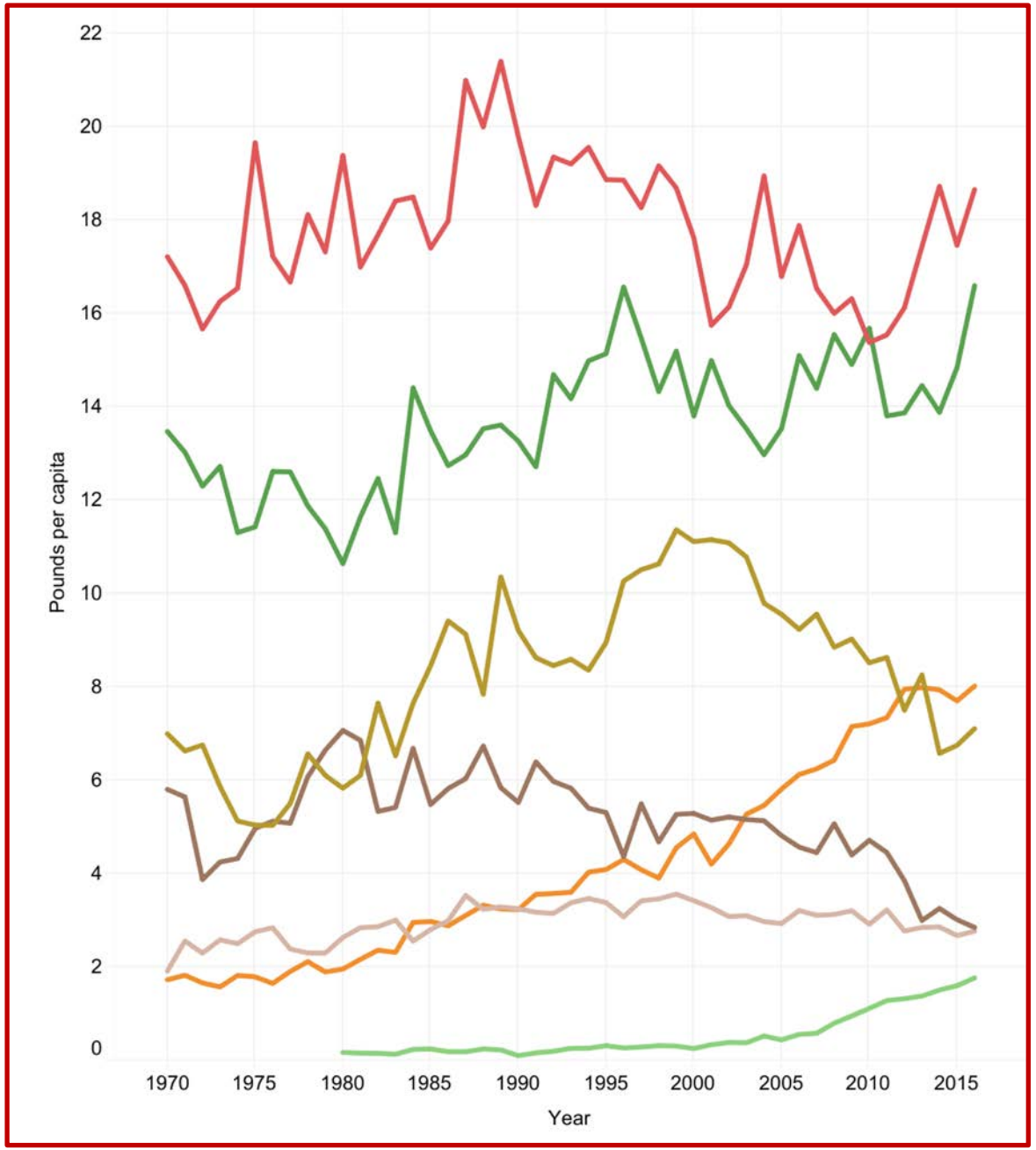
Fresh Fruit

Per Capita Availability

- Apples, watermelons remain key fruits
- Cantaloupe and peaches/nectarines in decline
- Berries on the rise
- Not shown: Bananas remain top fruit



Source: USDA Economic Research Service

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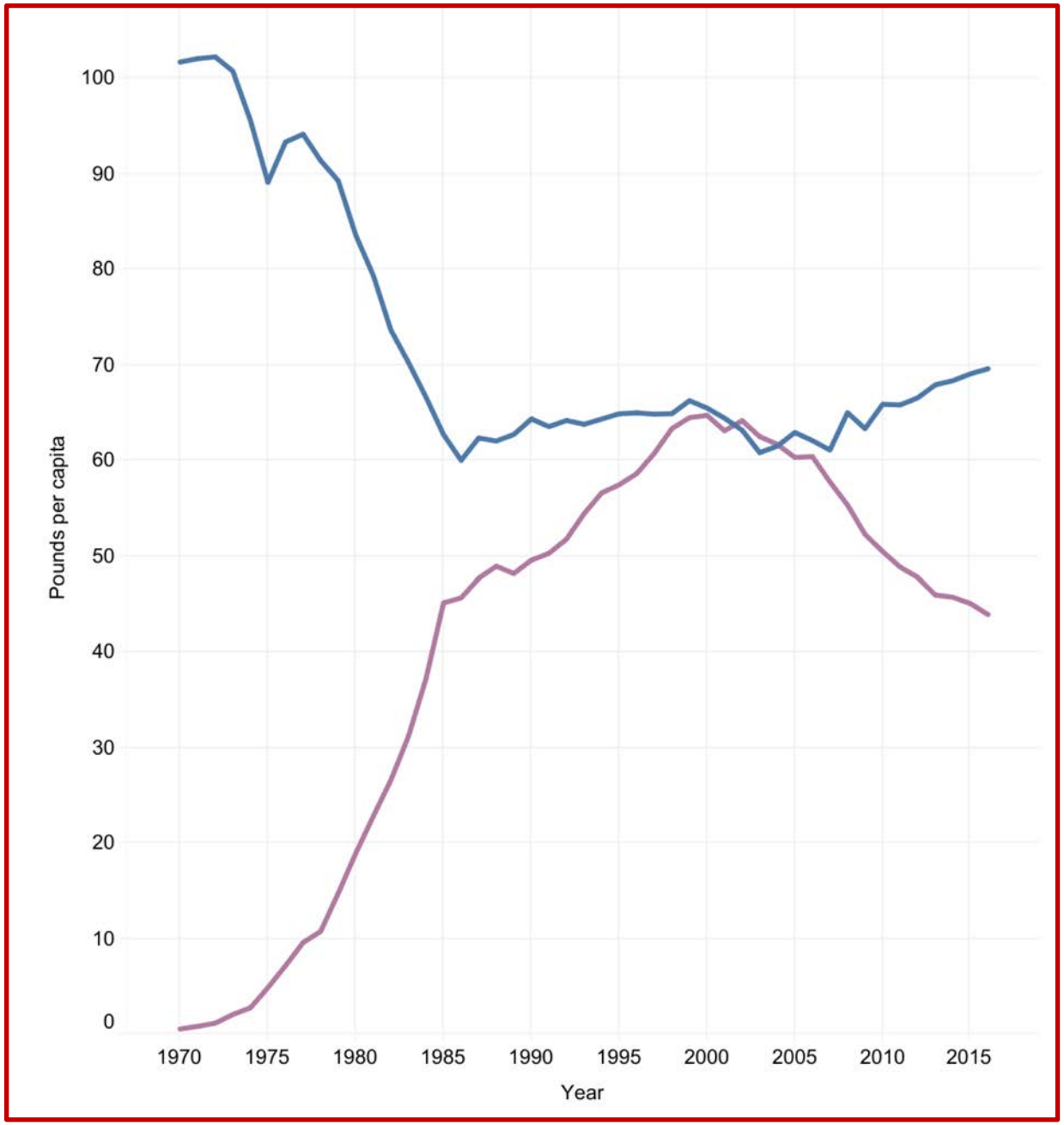
Sweeteners
Per Capita Availability

-- Beet and cane sugar

-- High fructose corn syrup



Source: USDA Economic Research Service

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Differences across generations

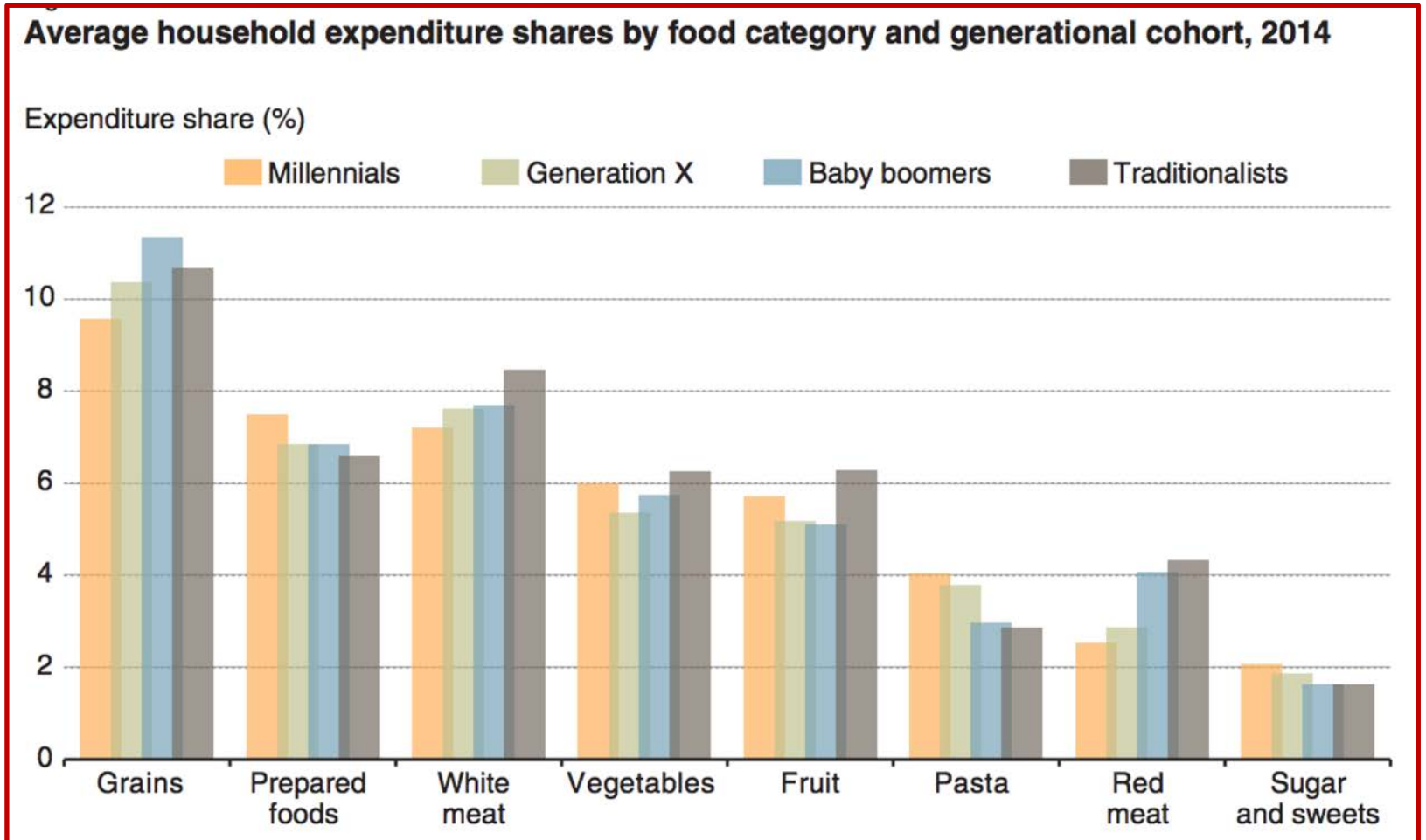
Post-Millennials: 6-21

Millennials: 22-37

Gen X: 38-53

Baby Boomers: 54-72

Traditionalists/Silent Generation: 73-89



Source: USDA, Economic Research Service using Information Resource Inc. data, 2014.
Note: Figure 3 shows the average percentage of the total household budget that was allocated to each selected food group by generation cohort.

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Outlook for Food Demand

Continued focus on health continue, supporting demand for:

- Chicken
- Lowfat milk
- Fresh fruits and vegetables

Things to watch for:

- Lingering concerns about food safety in fresh supply chain
- Continued growth of niche products, despite being small share of whole
  - **Meat substitutes + lab-grown meat – big players investing**
  - **Non-dairy milk substitutes**

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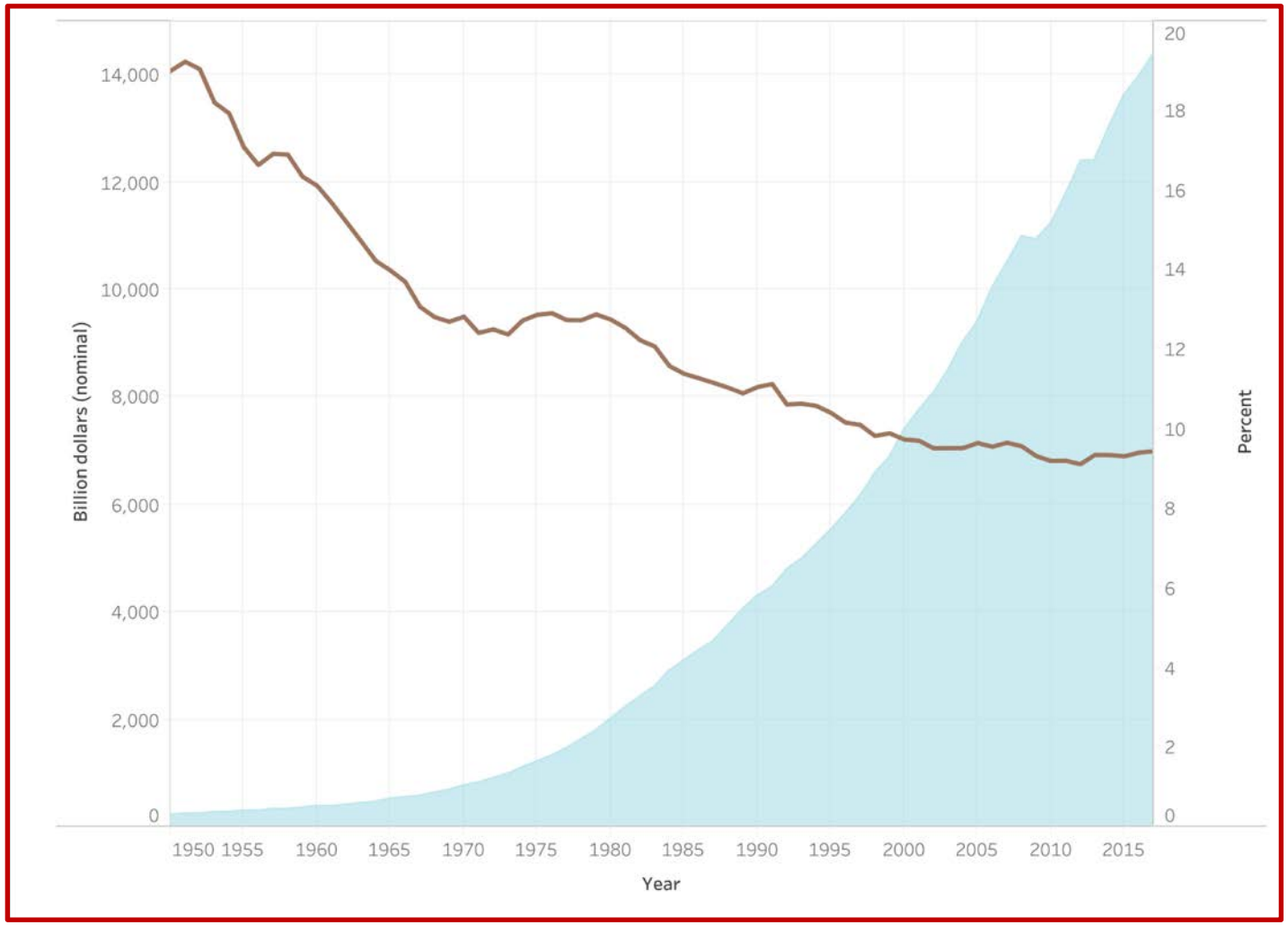
How much are consumers spending?

Household Food Expenditure Share (1950-2015)

-- Household food expenditures as a share of disposable personal income

Disposable personal income



Source: USDA Economic Research Service

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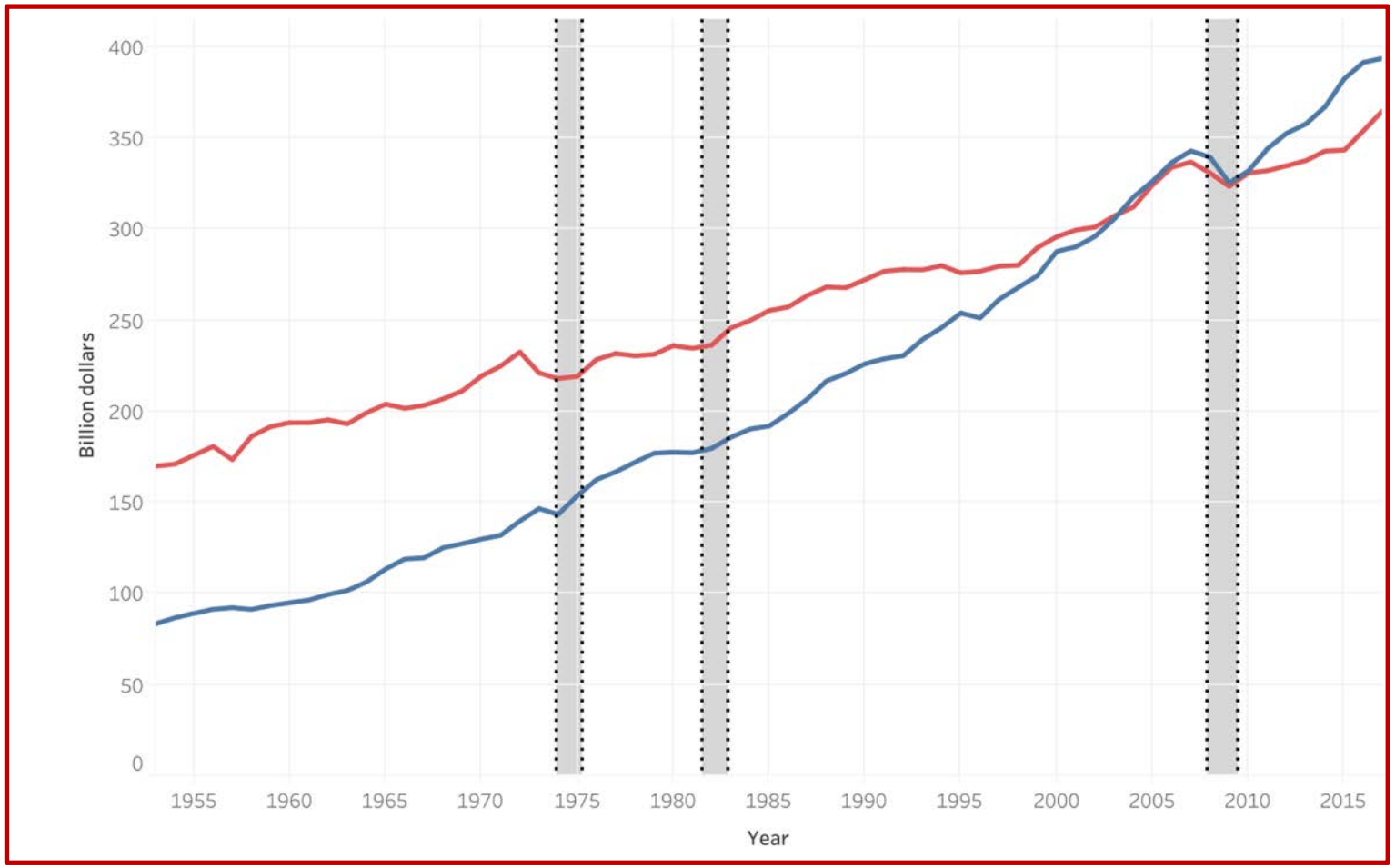
Total Food Expenditures (1955-2015)

-- Food at home

-- Food away from home

Note 1: Measured in constant 1988 dollars

Note 2: Gray shaded areas are recessions



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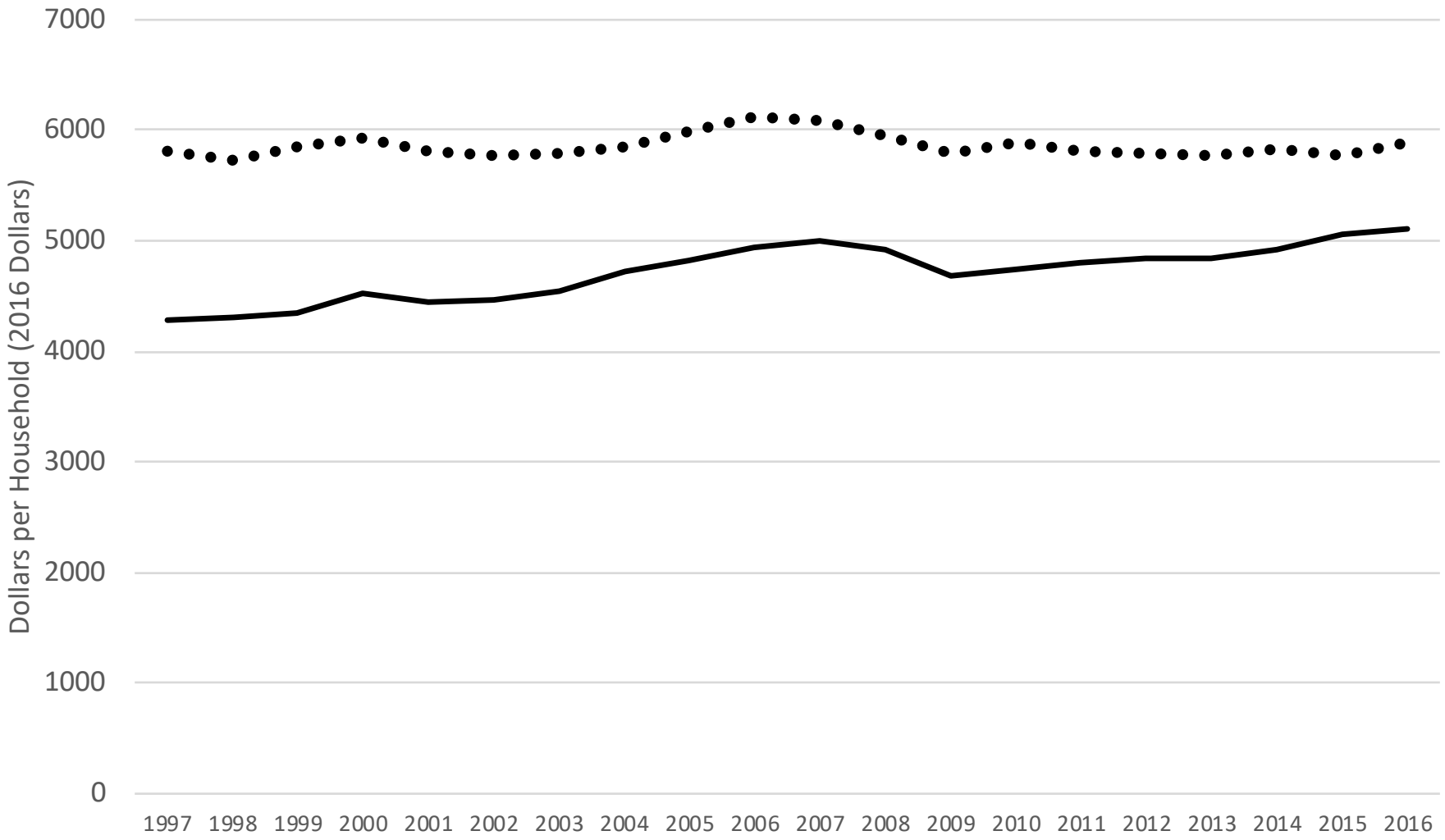
Source: USDA Economic Research Service

Household Food Expenditures



Source: Graphed by the author using data from the USDA Economic Research Service

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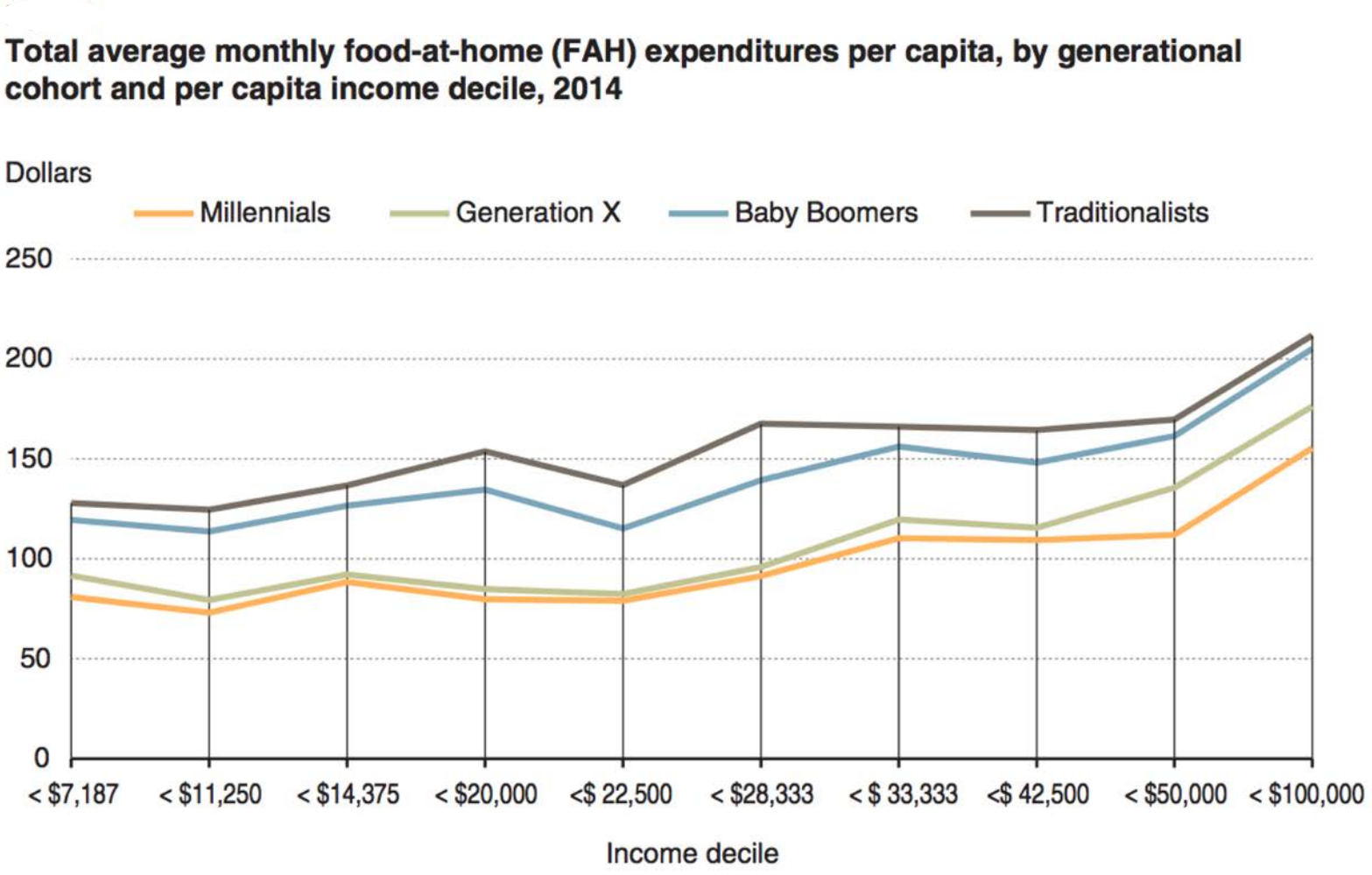
Differences across generations

- Millennials spend least across all income levels
- Traditionalists spend most across all income levels



Source: USDA, Economic Research Service using Information Resources, Inc. data, 2014.

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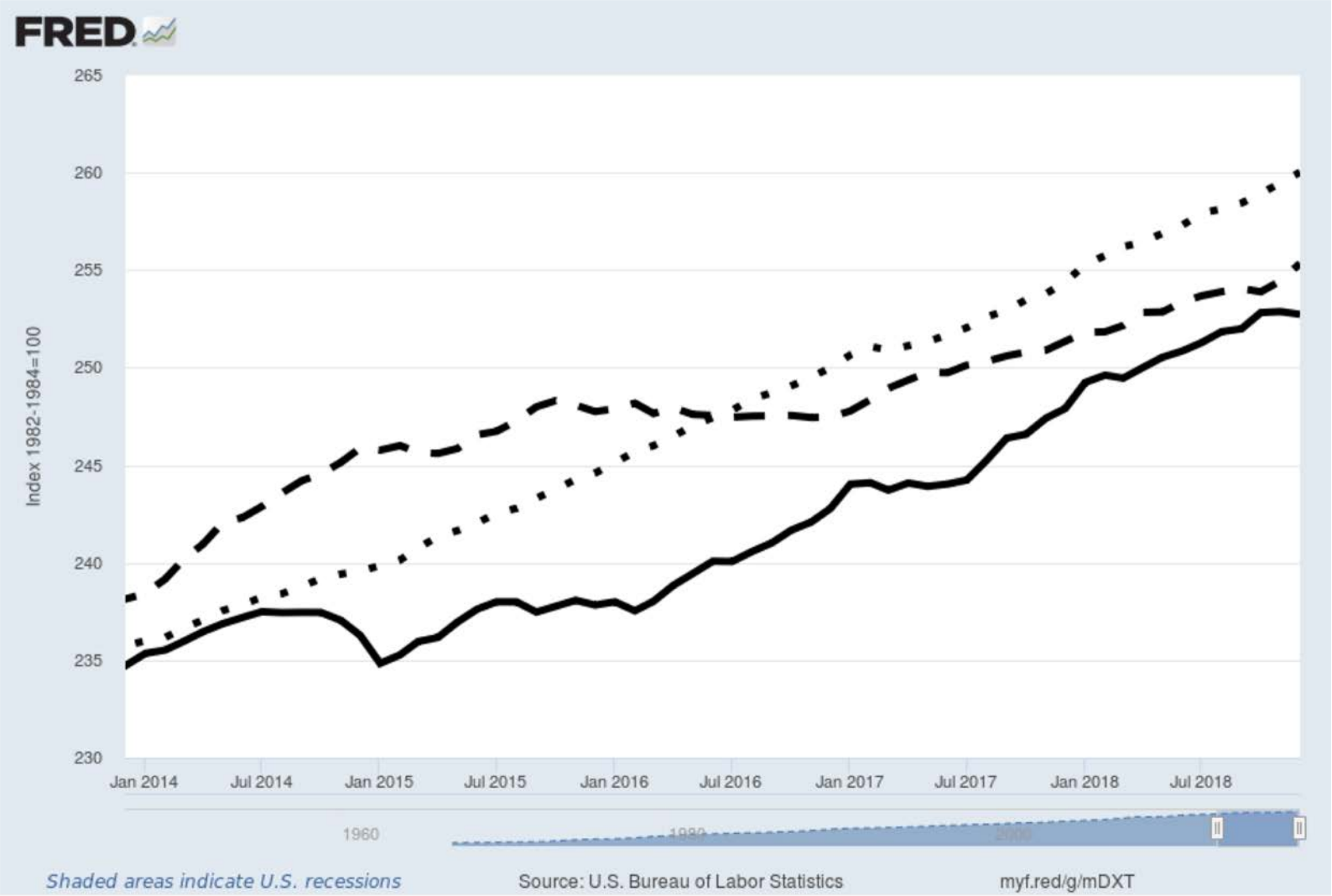
US Consumer Price Index (last 5 years)

.... All items minus food and energy

-- -- Food and beverages

----- All items



Source: St. Louis Federal Reserve Bank

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Outlook for Consumer Price Indices in 2019

Expected to *increase*	Expected to *stay about the same*	Expected to *decrease*
Beef + veal	Pork	Fats + oils
Poultry	Other meats	
Fish + seafood	Eggs	
Dairy products	Processed fruits + vegetables	
Fresh fruits	Sugar + sweets	
Fresh vegetables	Nonalcoholic beverages	
Cereals + bakery products	Other foods	

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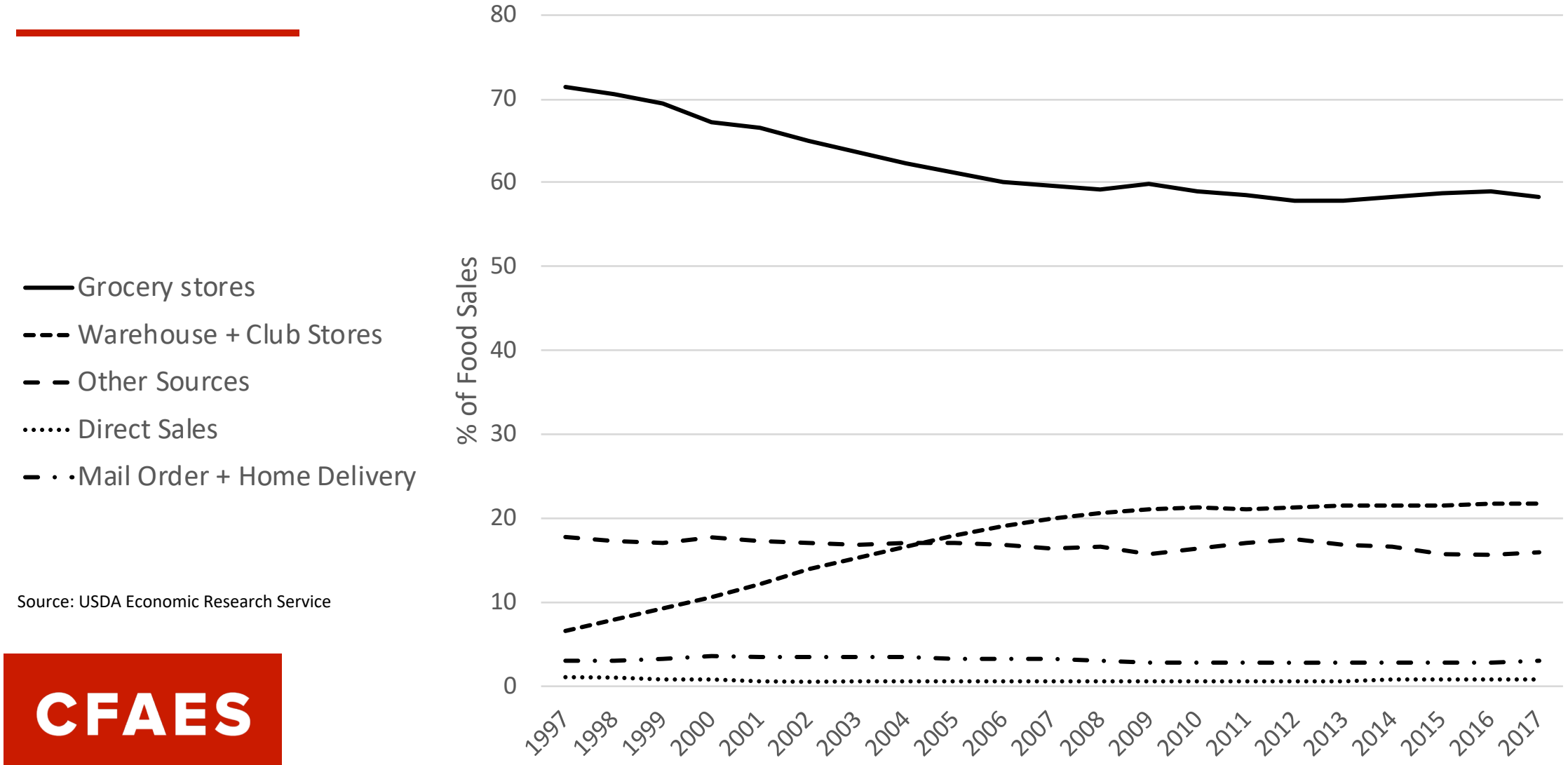
Source: USDA Economic Research Service

Where are consumers buying food?

Where are consumers buying their food?



Source: USDA Economic Research Service

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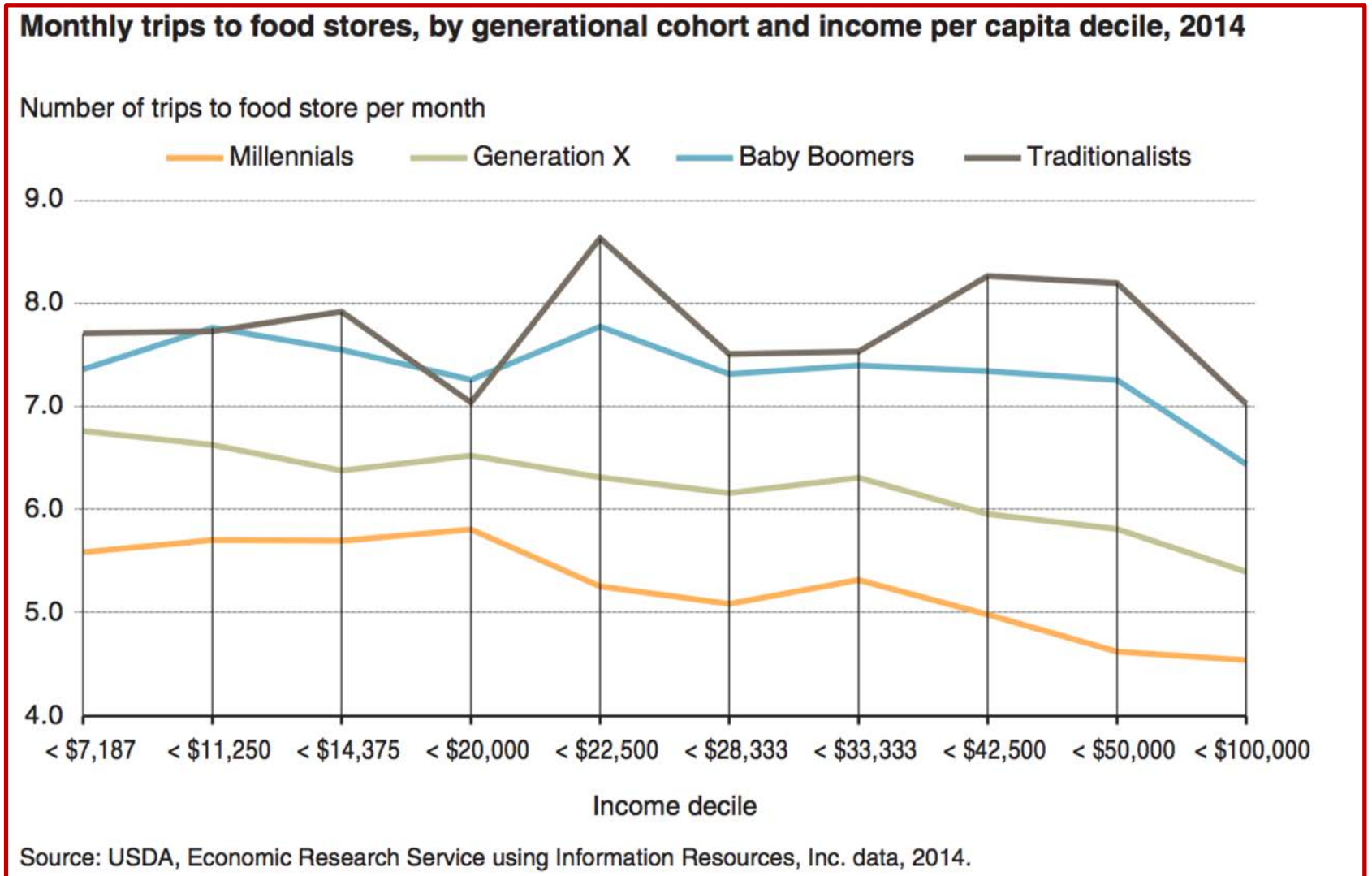
Differences across generations

- Traditionalists go to food stores much more often than Millennials



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Trends in online shopping

Grocery delivery – major expansion in 2018

- Amazon Prime Now (1-2 hours) in Columbus, Cincinnati, Cleveland
- Kroger delivering throughout Ohio
- Wal-Mart delivering throughout Central Ohio

Curbside pick-up

- Order your items online and pick up at the store
- Offered by Wal-Mart, Kroger, and others

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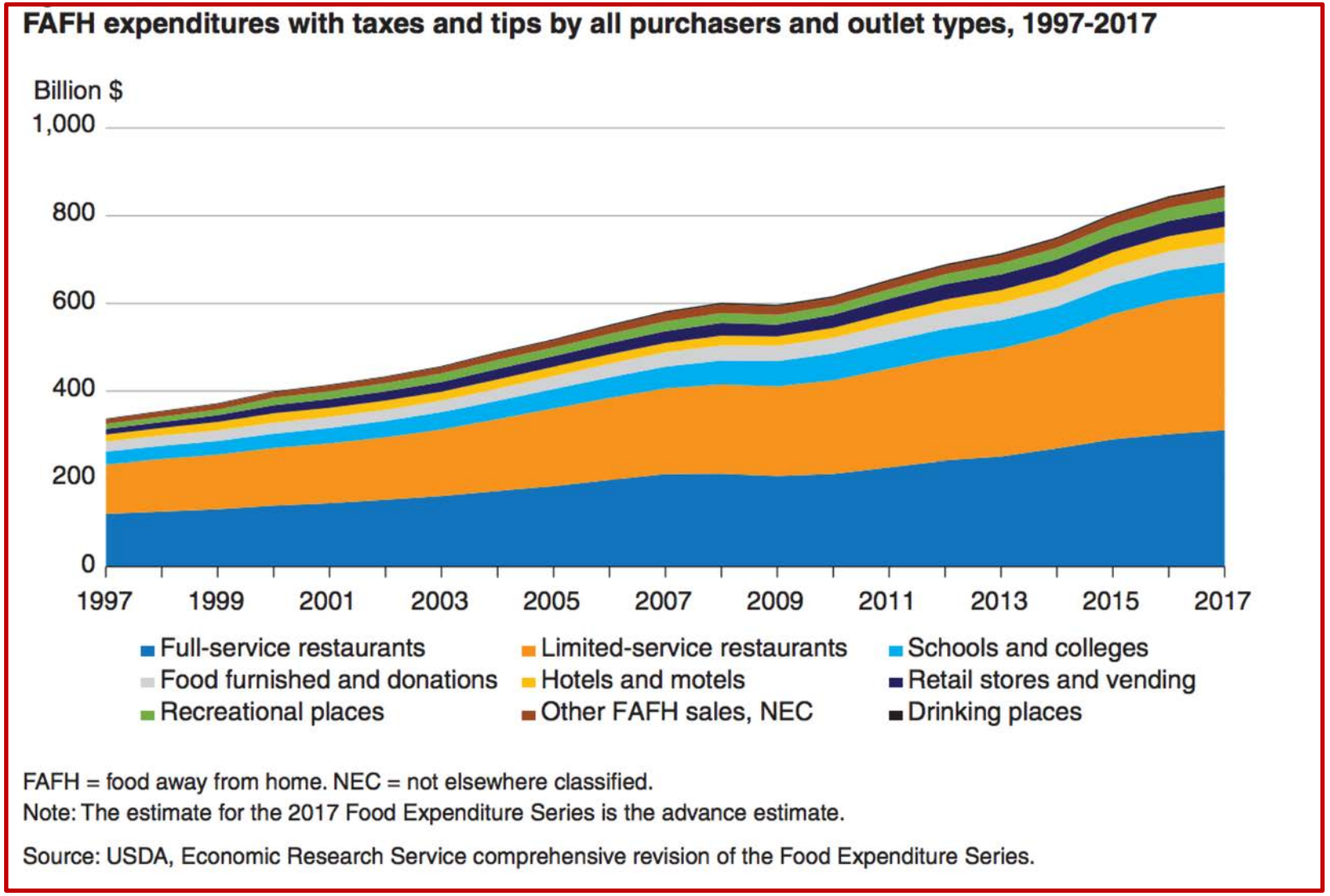
Food away from home

- Limited service restaurants overtook full-service restaurants
- Limited service restaurants more popular with Millennials



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Outlook

Consumers will continue to focus on price and convenience

- Grocery stores and superstores will maintain importance
- Discount stores will increase in importance

Watch for…

- Rapid growth in grocery delivery and curbside pick-up
- New models of online shopping
- More efforts to attract Millennials to dining establishments

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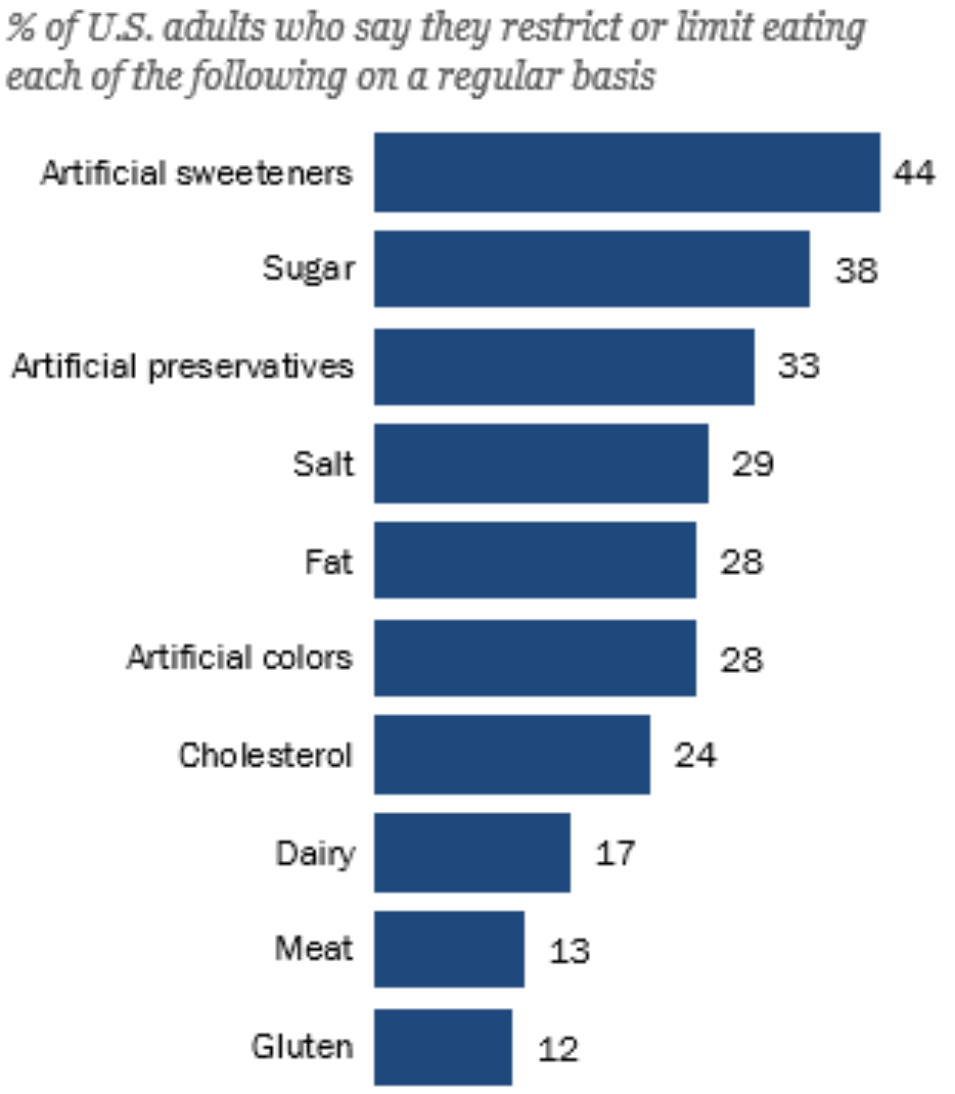
How are concerns about health + values affecting shopping patterns?

Growing demand for foods perceived to healthy

Consumers are trying to eat healthier



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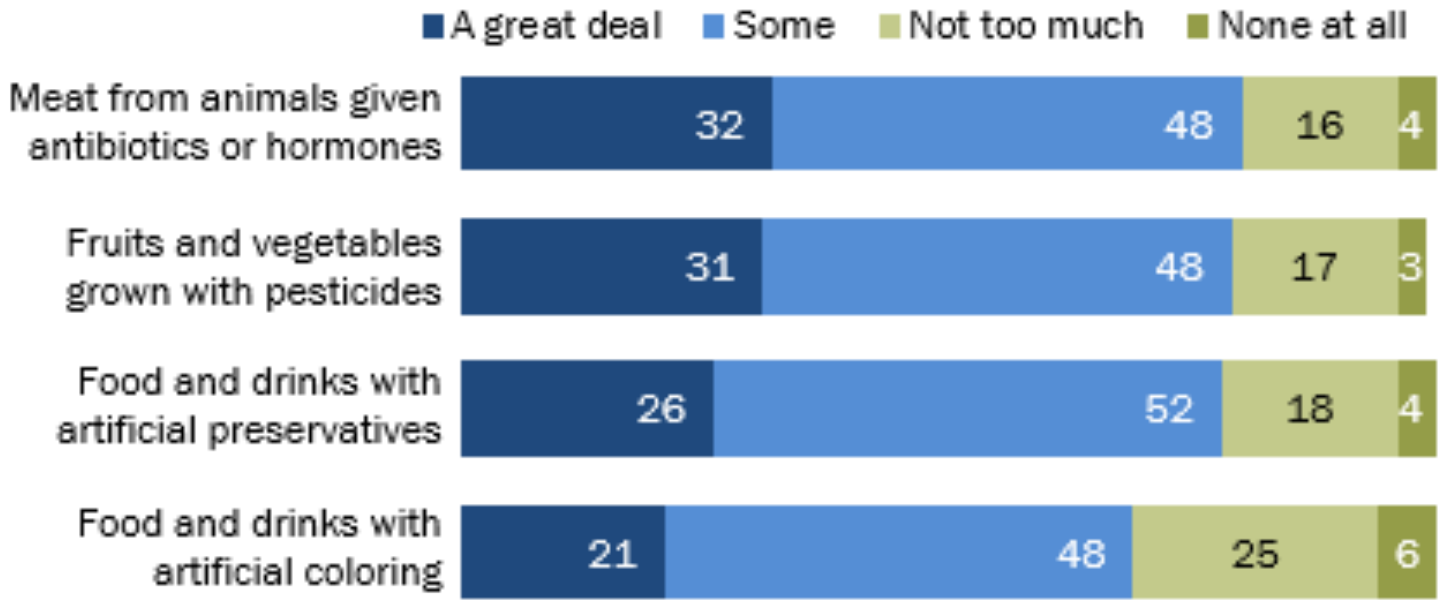
But they don't agree on what's healthy

% of U.S. adults who say ____ has the following health risk for the average person over the course of their lifetime



Note: Respondents who did not give an answer are not shown.
Source: Survey conducted April 23-May 6, 2018.
"Public Perspectives on Food Risks"

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Some foods may check several boxes

Perceived to be healthier

- “Natural,” organic, non-GMO, local

Perceived to be better for environment

- “Natural,” organic, non-GMO, local

Perceived to be better for community

- Organic, local

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Organic market

U.S. Organic Food vs. Total Food Sales, Growth and Penetration, 2008-2017

Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Organic Food	20,393	21,266	22,961	25,148	27,965	31,378	35,099	39,006	42,507	45,209
Growth (%)	17.5%	4.3%	8.0%	9.5%	11.2%	12.2%	11.9%	11.1%	9.0%	6.4%
Total Food	659,012	669,556	677,354	713,985	740,450	760,486	787,575	807,998	812,907	822,160
Growth (%)	4.9%	1.6%	1.2%	5.4%	3.7%	2.7%	3.6%	2.6%	0.6%	1.1%
Organic (as % Total)	3.1%	3.2%	3.4%	3.5%	3.8%	4.1%	4.5%	4.8%	5.2%	5.5%

Source: Organic Trade Association's *2018 Organic Industry Survey* conducted 1/25/2018 - 3/26/2018 ($mil., consumer sales).

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Consumer perceptions of organic

79% of consumers see at least some risk to health from eating fruits and vegetables grown with pesticides

Many view organic as healthier, but likely don't fully understand standard

- Example: Don't know organic is also non-GMO

Issues arising among some organic consumers:

- Increasingly concern about "corporate" control
- Losing trust in organic standard

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Producer perceptions of organic

Some see organic farms meeting letter of law, but not spirit

- Organic imports
  - **Are they fully meeting the same standards?**
- Can hydroponics + aquaponics still be considered organic?
  - **Controversial**
  - **National Organic Standards Board decided to keep, but narrowly passed**
- Time to develop a new standard?
  - **Regenerative agriculture**

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Outlook for organic

Organic market will continue to be small but important

- Continued growth but growth rate may plateau

Watch for…

- Introduction of food claims, food labels and certifications that consumers see as substitutes for organic

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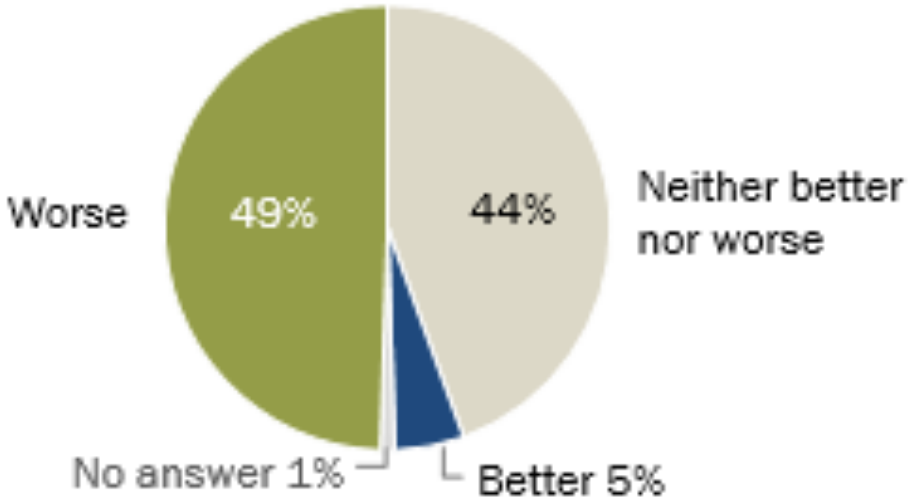
Half of US adults see GMOs as less healthy

% of U.S. adults who say genetically modified foods are ____ for one's health than foods with no genetically modified ingredients



Note: Beliefs about the health effects of genetically modified (GM) foods include those who lean toward each response.
Source: Survey conducted April 23-May 6, 2018.
"Public Perspectives on Food Risks"

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Voluntary switch to non-GMO inputs

Some firms pre-empting regulation

- ADM and Cargill offer non-GMO starches, sweeteners and other ingredients
- Cheerios, Grape Nuts and other cereals have moved to non-GMO
- Recent evidence suggest price for sugar from sugar beets and sugar from sugar cane diverged when Vermont labeling law went into effect

Sales of Non-GMO Project verified products now $26 billion

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Changing GMO environment: Gene editing

CRISPR-Cas9 technique allows silencing of genes with no insertion of gene from an outside organism

Gene edited apples + potatoes (using RNAi) introduced to market in recent years

Europe announced gene edited crops subject to same standards as GMOs

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Changing GMO environment: Regulation

New USDA label for GMOs introduced in December

- Only applies to foods with detectable changes in genetic material
- Exempts gene-edited foods
- Exempts milk, meat from livestock fed with GMOs

Proposed overhaul of biotech regulation likely to be announced this spring by USDA

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Outlook for GMOs

Consumer concern about GMOs will not fade anytime soon

- Companies may remove GMOs voluntarily for some products regardless of regulatory environment to maintain competitive advantage
- Could strengthen demand for non-GMO inputs

Regulatory environment will remain uncertain in US and elsewhere

- Regulators working to keep up with scientific advances

Watch for…

- New USDA regulation coming Spring 2019
- Discussions about how new labels will be implemented in 2020

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Local and direct marketing

Consumers see local and direct purchasing as a way to:

- Get fresher, better tasting food
- Eat healthier
- Support their community
- Acquire food from a source they ***trust***

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Local and direct sales in the US

Sales of $8.7 billion in 2015

Represents 1-2% of all farm sales

Sales split evenly between:

- Consumer
- Retail
- Institutions and intermediaries

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Local and direct sales in Ohio

Sales of $184 million in 2015

- Represents 1-2% of all farm sales

60% of sales directly to consumer

Direct-to-consumer market cooling from 2007 to 2012

- Decline in number of farmers selling directly to consumers
- Decline in revenue per farm from selling directly to consumers

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Outlook

Direct sales will continue to grow but composition will be different

- More purchasing via retailers, institutions, intermediaries
- Less purchasing directly from farmers
- Will likely still in a premium for local

Watch for…

- Opportunities to partner with large institutional buyers
- Potential saturation of narrow markets due to competition

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Closing thoughts

Consumers' purchasing patterns are driven by: price, taste, convenience, health + wellness, values

While drivers largely have not changed, they might look different going forward when combined with factors like…

- Demographic changes in the US
- Socioeconomic inequality
- Scientific advances
- Technological advances

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Thank you!

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