

2015 Agricultural Symposium: Responding to Future Food Demands

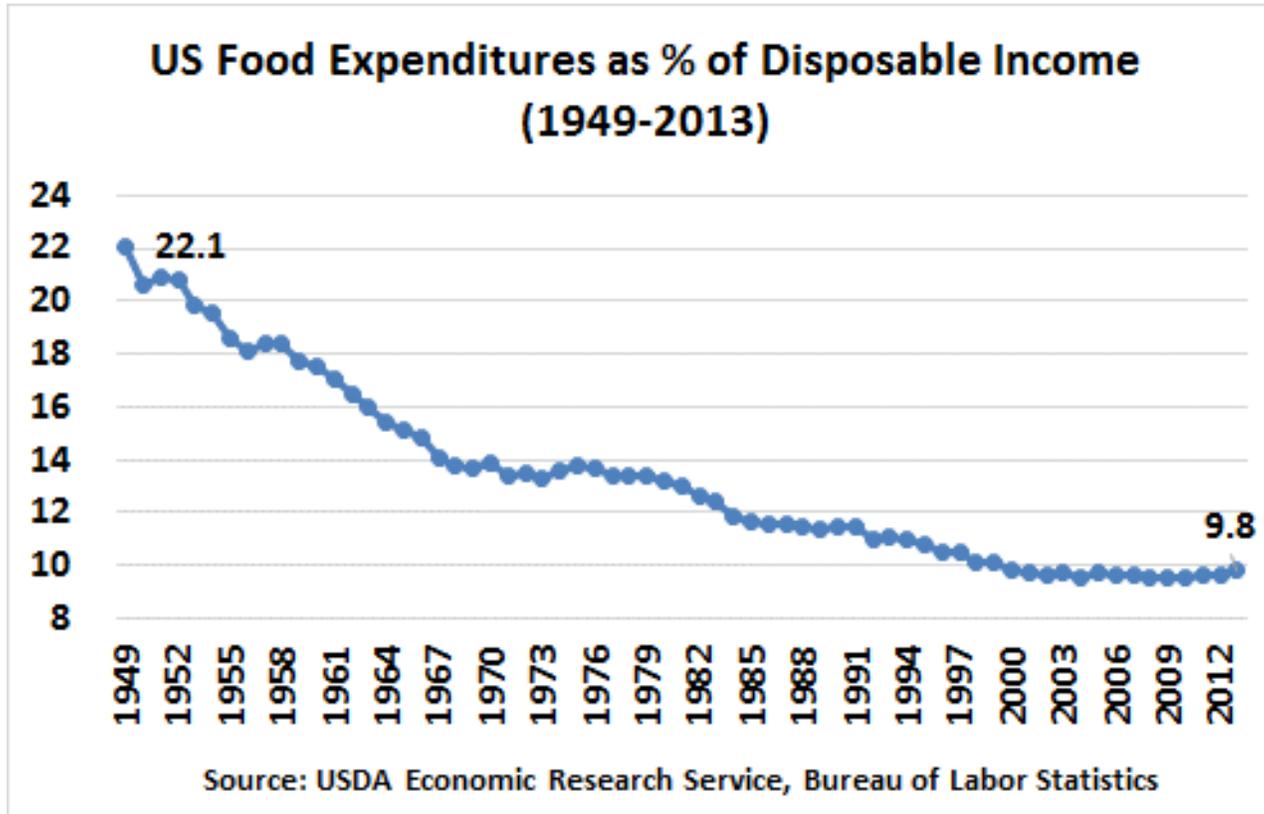
- Hosted by the Federal Reserve Bank of KC

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JULY 14, 2015

Food Expenditures Have Declined Sharply Over Past 60 Years

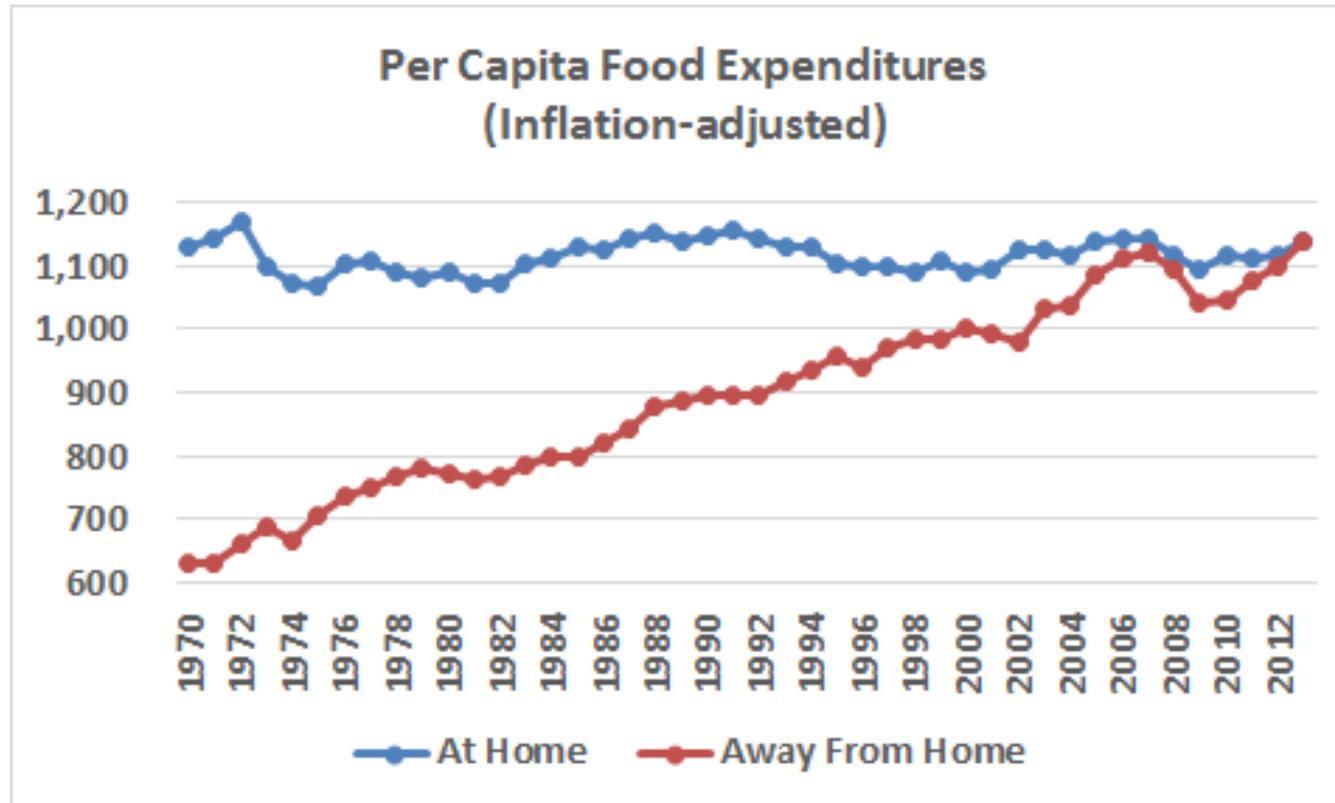


Country By Country Comparison (2012):

- US 9.8%
- Canada 9.5%
- Germany 11.7%
- France 13.7%
- Japan 13.7%
- Mexico 24.9%
- Vietnam 35.9%
- Nigeria 56.9%

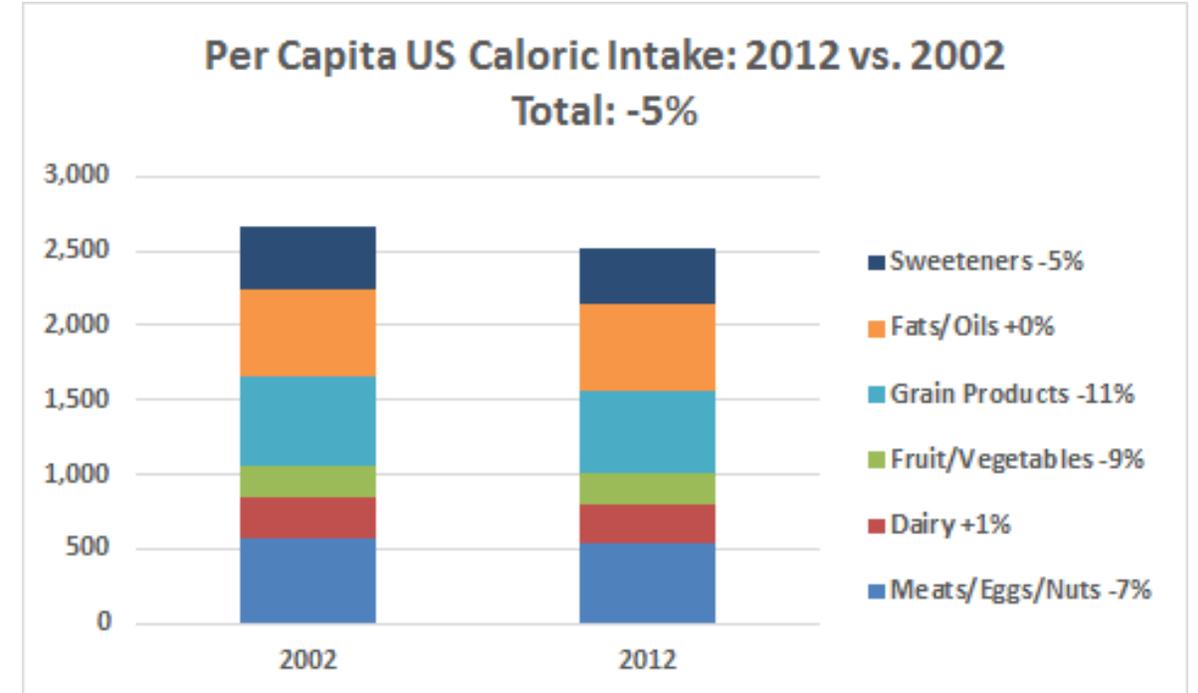
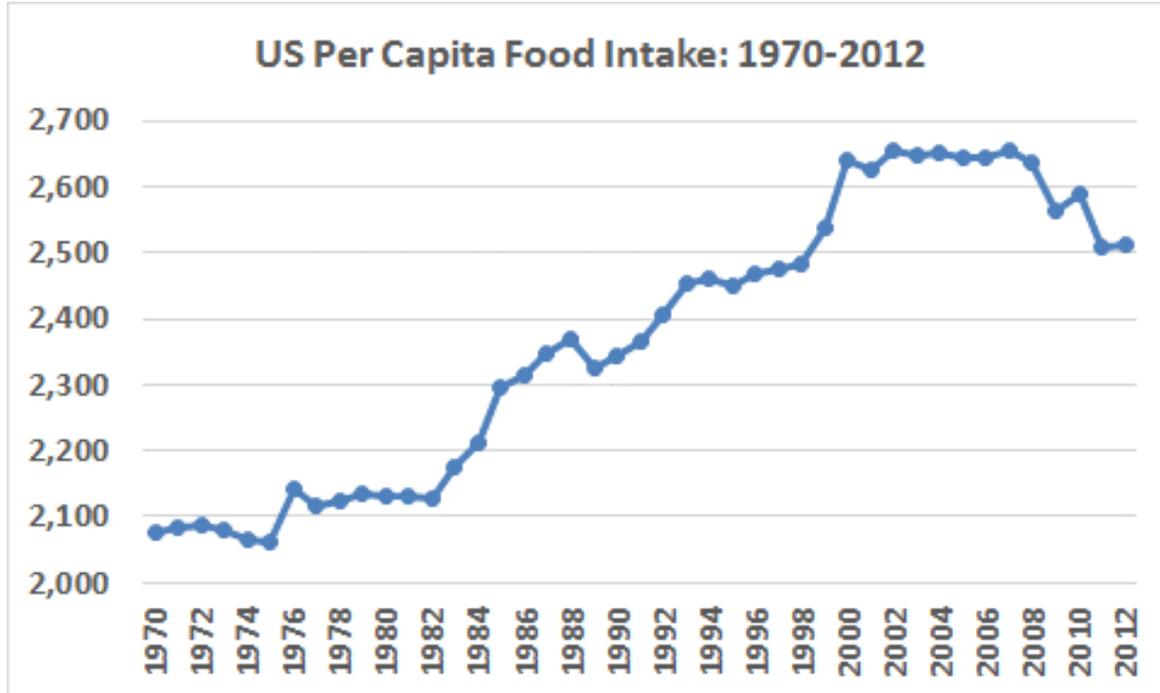
Source: USDA ERS, Euromonitor International

Away-From-Home Dining Spend Now About Equal to At-Home



Source: USDA Economic Research Service, Bureau of Labor Statistics

US Calorie Intake Declining Since 2002



Source: USDA Economic Research Service

Personal Consumption Expenditures - \$ Billion (2022 Forecast)

	Billions of 2005 Dollars					
	2002	% of ttl	2012	% of ttl	2022	% of ttl
Personal consumption expenditures	\$ 8,018	100.0%	\$ 9,603	100.0%	\$ 12,380	100.0%
Durable goods	\$ 928		\$ 1,361		\$ 1,936	
Motor vehicles and parts	\$ 394	4.9%	\$ 373	3.9%	\$ 523	4.2%
Other durable goods	\$ 536	6.7%	\$ 996	10.4%	\$ 1,439	11.6%
Nondurable goods	\$ 1,780		\$ 2,095		\$ 2,557	
Food	\$ 609	7.6%	\$ 686	7.1%	\$ 766	6.2%
Gasoline	\$ 294	3.7%	\$ 269	2.8%	\$ 288	2.3%
Other nondurable goods	\$ 881	11.0%	\$ 1,155	12.0%	\$ 1,544	12.5%
Services	\$ 5,319		\$ 6,177		\$ 7,973	
Housing services	\$ 1,462	18.2%	\$ 1,678	17.5%	\$ 2,061	16.6%
Medical services	\$ 1,203	15.0%	\$ 1,517	15.8%	\$ 2,071	16.7%
Other services	\$ 2,654	33.1%	\$ 2,981	31.0%	\$ 3,834	31.0%

← Total real expenditures forecast to rise 29% between 2012 and 2022

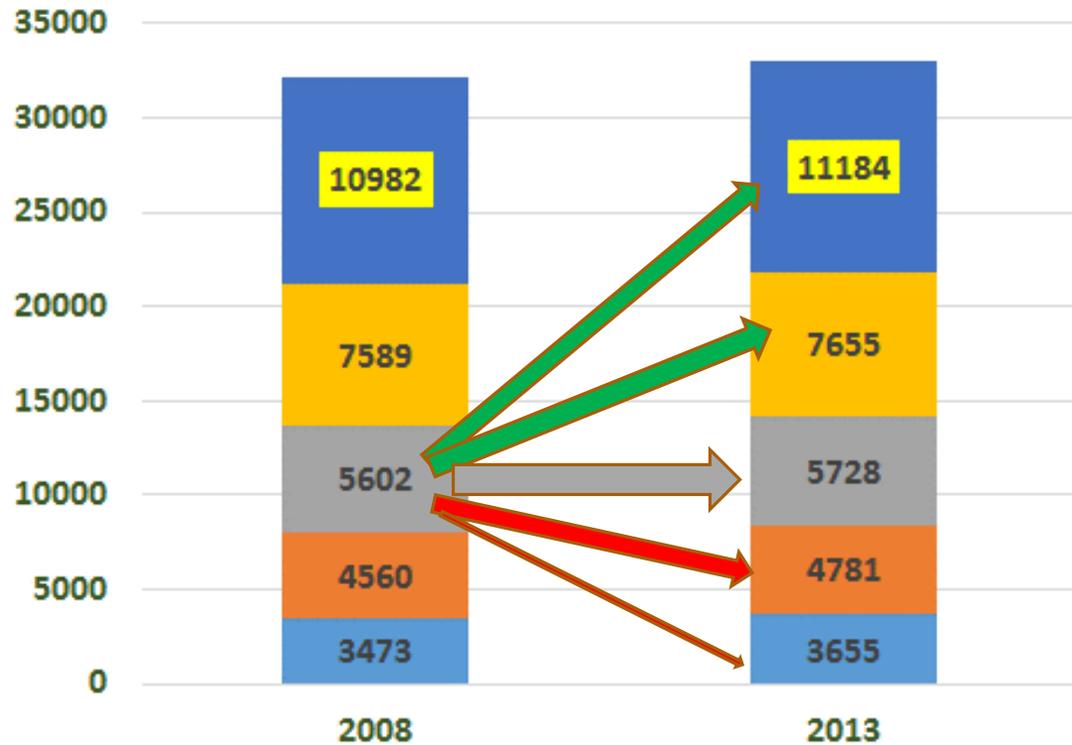
← Real food expenditures forecast to rise 12% between 2012 and 2022

Q: What foods will consumer buy with the additional income?

Source: Bureau of Economic Analysis, Bureau of Labor Statistics

What is impact of people moving to different income quintiles?

Real Food Expenditures By Income Quintine



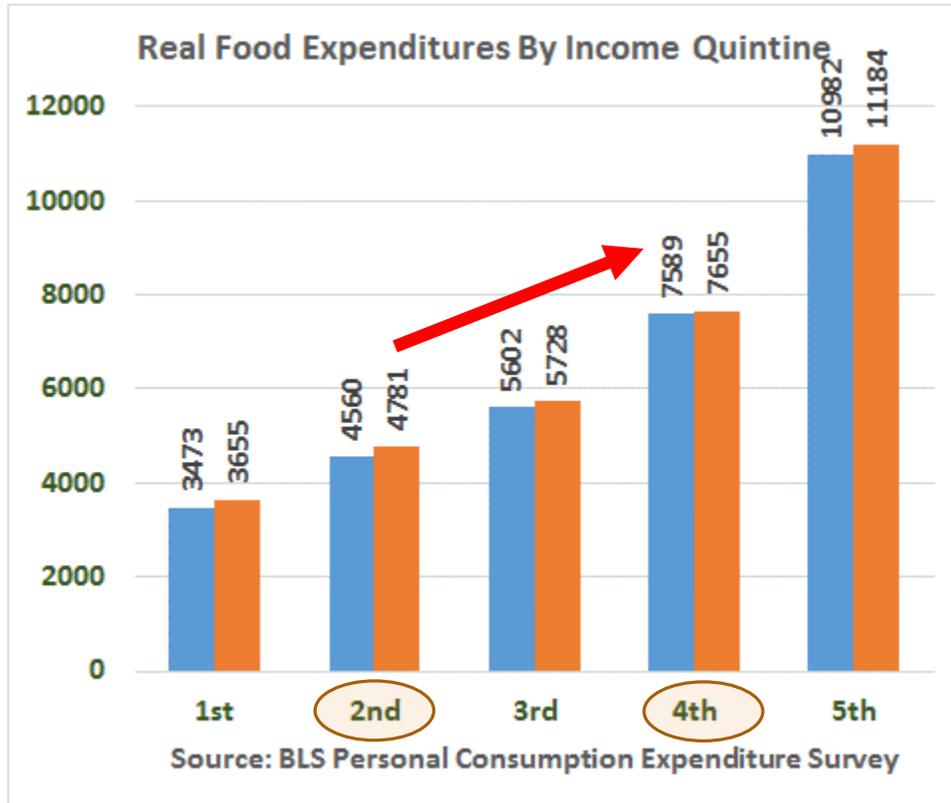
Source: BLS Personal Consumption Expenditure Survey

Middle Quintile Family in 2008: Spent \$5602 on food
- **By 2013: \$5728 spent on food (+2.2%)**

- **10% moved to lowest quintile: Food spend -35%**
- **17% moved to second quintile: Food spend -15%**
- **42% remained in third quintile: Food spend +2.2%**
- **24% moved to fourth quintile: Food spend +37%**
- **8% moved to highest quintile: Food spend +99%**

Q: What foods will consumer buy with the additional income?

Higher Income leads to higher food expenditures



Comparing the fourth quintile to the second quintile:

- 97% higher away from home food expenditures
- 41% higher beef expenditures
- 55% higher fruit/vegetable expenditures
- 108% higher alcohol expenditures



What are some key drivers of changes in individuals' food consumption patterns?

- **Changes in individuals' income levels**
- **Entry of millennials into workforce (born 1981-1997)**
- **Growing diversity/ethnicity of population**
- **Health concerns / costs**
- **Rising demand for transparency**
- **Governmental skepticism**
- **Reduced hereditary connection to farming**



What are new priorities / trend in food purchased in future

- **More dining away from home**
- **Increased convenience**
- **Greater transparency (labeling, public relations, website info)**
- **Wider variety of food options**
- **Organic**
- **“Natural”**
- **Locally grown**
- **No artificial ingredients**
- **Health benefits (eg, gluten free)**
- **GMO-free products?**

Headlines worth noting...

- “Specialty gourmet retailers generate \$18 B annually, growing 10% annually”
- “Panera issues ‘no-no’ list of 81 ingredients”

- “Papa John’s spending \$100 mm to eliminate artificial ingredients”
- “General Mills plans gluten-free Lucky Charms”
- “General Mills buys Annie’s for \$820 mm”
- “Hormel paying \$775 to buy organic meats maker Applegate Farms”
- “Chick-fil-A committed to removing chicken treated with antibiotics in next 5 years”
- “Tyson urges farmers to improve housing for pregnant pigs”

--- From Millennial Marketing:

- “Millennials want more facts about their food”
- “Millennials believe they consume healthier, more expensive, more natural/organic, less processed food than their parents”

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