# Agriculture & Farming Equipment Market Résearch

# Over 60 million people live in Rural America.

Who are they and why are they an important audience for agriculture & farming equipment marketing?



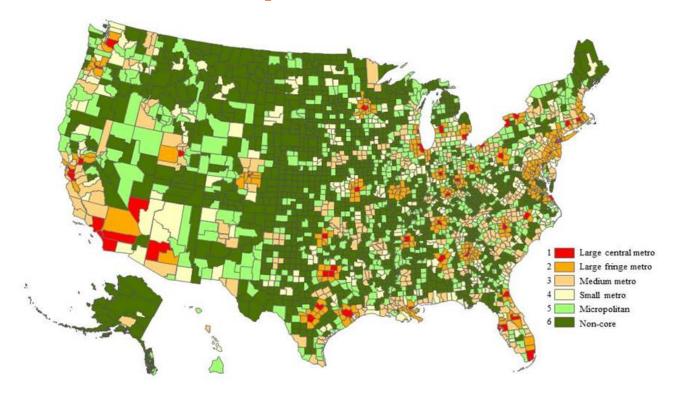
### **Demographic Overview**

Demographics by County									
	D County	C County	B County	A County					
Gender	50.2% Female, 49.8% Male	52.7% Female, 47.3% Male	52% Female, 48% Male	51.7% Female, 48.9% Male					
Average Age	57 Years Old	50 Years Old	44 Years Old	46 Years Old					
Average Income	\$49,000 Per Year	\$55,000 Per Year	\$63,000 Per Year	\$76,000 Per Year					
Race	81.5% White 11.8% African American 6.0% Other 0.7% Asian	85.3% White 6.7% African American 6.0% Other 2.0% Asian	74.3% White 11.4% African American 8.9% Other 5.4% Asian	66.1% White 14.6% African American 10.8% Other 8.4% Asian					
Ethnicity	92.8% Non-Hispanic 7.2% Hispanic	89.3% Non-Hispanic 10.7% Hispanic	84.7% Non-Hispanic 14.3% Hispanic	79.1% Non-Hispanic 20.9% Hispanic					
Average Number of People in Household	Eight or more	One	Six	Seven					





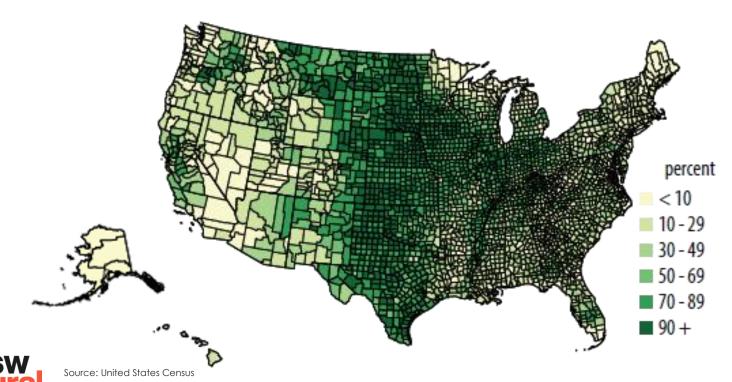
### **US Audience Population**





#### **U.S. Farmland**

Just over 41% of all U.S. land is farmland.





#### Fast Facts About American Farming

- 2.2 million farms cover America's rural landscape.
- Farms cover roughly 40% of the US land mass
- 8% of U.S. farms market foods locally, through direct-to-consumer or intermediated sales.
- One U.S. farm feeds 165 people annually in the U.S. and abroad.
- The global population is expected to increase to 9.7 billion by 2050 farmers will have to grow about 70% more food than what is now produced.
- In 2014, the U.S. farming industry employed more than 827,000 people around the country.



#### **American Farming Economics**

- About 99% of U.S. farms are operated by families individuals, family partnerships, or family corporations.
- Farmers and ranchers receive \$0.16 out of every dollar spent on food.
  - The rest goes towards costs beyond the farm's borders: wages and materials for production, processing, marketing, transportation, and distribution.
  - The amount of money which goes into a farmer's pocket has declined in recent years In 1980, farmers and ranchers received \$0.31 for every dollar spent.
- In 2014, the U.S. farming industry employed more than 827,000 people around the country.
- Agriculture, food, and related industries contributed \$992 billion to U.S. gross domestic product (GDP) in 2015, a 5.5% share.
- The output of America's farms contributed \$136.7 billion of this sum about 1% of GDP.

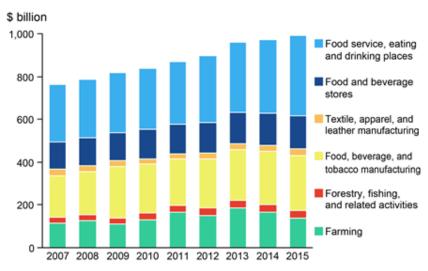
Workers in this sector need products and solutions that help meet the demands of this economy.



#### What Industries are Supported by Farming?

- The overall contribution of the agriculture sector to GDP are impacted by sectors related to agriculture, including:
  - Forestry, fishing, and related activities
  - Food, beverages, and tobacco products
  - Textiles, apparel, and leather products
  - Food and beverage stores
  - Food service, eating, and drinking places
- All of the above sectors rely on agricultural inputs in order to contribute added value to the economy.

Value added to GDP by agriculture, food, and related industries, 2007-15



Note: GDP refers to gross domestic product.

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry series,



#### **Local & Family Farms**

- 1/3 of farms in the U.S. have multiple operators.
- Large-scale farms are more likely to have multiple generations of farm operators.
- In 2016, 36% of principal farm operators were at least 65 years old.
- Midsize Family Farms have a gross cash farm income between \$350,000 and \$999,000.
- Large-scale Farms have a gross cash farm income of \$1,000,000 or more.
- Non-family Farms are any farm where the head operator and their related family members do not own a majority of the business.





#### Industrial vs. Local Farms

#### **Local Farms:**

- Family Farms still account for a large majority of farms and production in the U.S.
- Animals are more likely to be raised without the use of antibiotics.
- Sustainable farms only raise what the land is capable of.
- Sustainable farms protect water sources and conserve water.
- Owners of small farms are actively involved in and help build their rural communities.

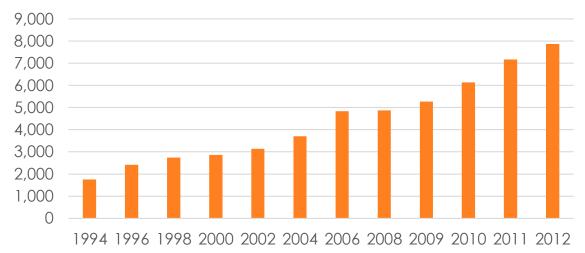
#### **Industrial Farms:**

- Routine use of antibiotics is in place to promote growth and prevent disease.
- Industrial livestock production concentrates a large numbers of animals into a single area.
- Industrial farms reduce genetic diversity in animals because they only raise a few breeds.
- Small rural communities often become divided when industrial livestock facilities move into the area.



#### Rural vs. Urban Agriculture

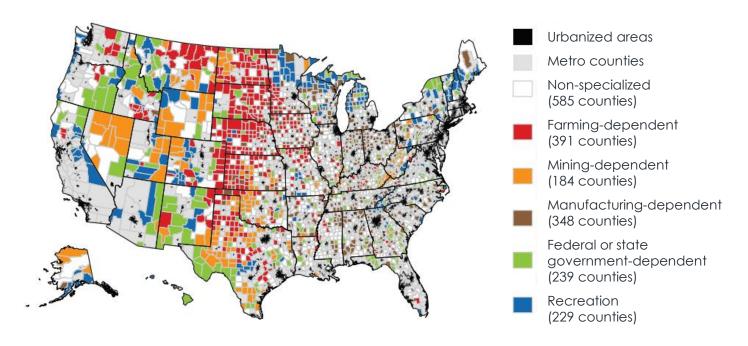
- Data from the USDA shows that the number of farmers markets has more than quadrupled in the past 18 years.
- Farmers markets have increased in number by about 28% in the past three years alone, reaching a total of 7,864 markets.
- The increase in farmers markets in the U.S. suggests that more consumers will have access to local goods, and have better opportunity to incorporate local food and non-food purchases into their regular shopping habits.







#### Most Popular Industries in the U.S.







#### Top 10 U.S. States Based on Number of Farms

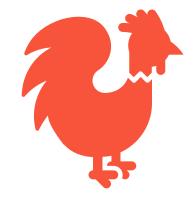
- Texas 240,000
- Missouri 97,300
- Iowa 86,900
- Oklahoma 77,200
- California 77,100
- Kentucky 76,800
- Ohio 73,600
- Minnesota 73,200
- Illinois 71,000
- Wisconsin 68,500





#### Top 10 Agriculture States by Profitability

- California \$47,041,467
- Iowa \$26,840,363
- Nebraska \$21,588,070
- Texas \$20,878,502
- Minnesota \$17,054,673
- Illinois \$16,258,840
- Kansas \$15,471,947
- Wisconsin \$10,767,618
- North Carolina \$10,576,290
- Indiana \$10,049,458







#### Top Types of Agriculture in the U.S.

According to the USDA Economic Research Services, these are the top 10 produce crops in the United States:

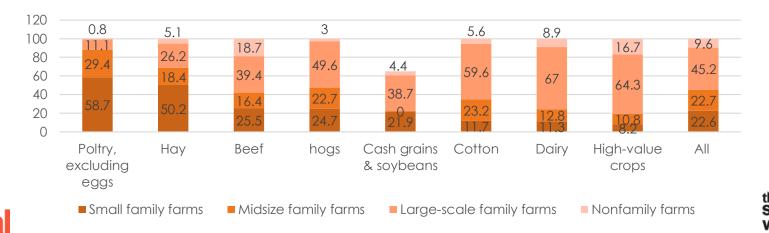
- Corn
  - The widely-produced and -used crop in the U.S. covers over 90 million acres and is used for things like feeding livestock, industrial products, and in food and beverage products.
- Cotton & Wool
  - The U.S. is third in the world for largest cotton producer and leading exporter. The cotton industry contributes over \$21 billion a year and generates over 125,000 jobs in rural areas.
- Fruit
  - The fruit industry in the U.S. contributes over \$25 billion in farm cash receipts annually.
- Tree Nuts
  - The tree nut industry makes up 13% of the total receipts for all agricultural commodities and 7% of all crops.
- Rice
  - Combined, the southern U.S. and California grow three different types of rice: short, medium, and long grains.

- Soybeans and oil crops
  - The U.S. is the leading soybean producer and exporter in the world, accounting for 90% of total oilseed production.
- Sugar and sweeteners
  - The U.S. is the world's largest producer of sugar and other sweeteners, and is also one of the greatest consumers.
- Vegetables
  - Upper-midwestern states like Wisconsin, Michigan, and Minnesota grow the most acreage of vegetables.
- Pulses (beans, legumes, and peanuts)
  - These account for approximately 14% of U.S. cash crops.
- Wheat
  - This is the third largest field crop in the U.S., both in acreage and gross farm receipts.



#### Top Types of Agriculture in the U.S.

- Large family farms account for half of the U.S.'s hog production, and two-thirds of dairy & high-value crops.
- Midsize and large family farms dominate cotton (83%) and cash grains/soybean (74%) industries.
- Small farms account for 59% of the poultry and 50% of hay outputs.
- Non-family farms account for 16.7% of all high-value crops
- Together, small and large farms account for 2/3 of beef production (small farms have cow operations and large farms operate feedlots).



#### **Most Needed Agriculture Products**

- · Agriculture cameras
- · Agriculture computers
- Fencing
- Fueling & energy
- Hand tools
- Structures:
  - Barn, silo, stable, pigsty, chicken coop, garage/workshop, shed, pasture shelter, dairy facility, winery/brewery/distillery, office, greenhouse, and windbreaker/canopy
- Sub-types (agriculture):
  - Containment equipment, aerators & fountains, feeders, water pumps & filters, lighting, water chilling & warming equipment, faux habitats, cleaning equipment, controllers, monitors, sensors & interfaces, hatchery supplies, chemical water conditioners, hand tools, and lab appliances
- Vehicles:
  - Tractor, utility trucks, task vehicles, aircraft (crop duster), and semi-trailers

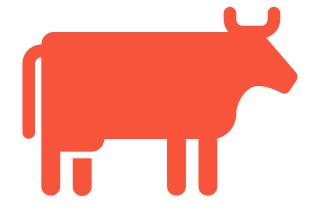
- Material handling equipment
  - Backhoes, excavators, skid-steers, forklifts, telehandlers, pallet jacks, hoists, personnel lifts, bale elevators, beaverslides, grain & seed handling equipment, wheelbarrows, and hand trucks
- · Horticulture equipment
  - Agrochemicals, balers, bale wrappers, biotechnologies, bird repellers, and harvesters
- Irrigation equipment
  - Surface irrigation, overhead irrigation, center pivot irrigation, wheel line irrigation, drop irrigation, wick irrigation, and inground irrigation
- Mowers, brush cutters, head cutters, and tree trimmers
- Sorters
- Woodchippers, tub grinders, and log splitters
- Husbandry equipment
  - Dairy equipment, poultry equipment, feeding & watering materials, grooming supplies, livestock chutes, ID equipment, incubators & brooders, saddles & bridles, and veterinary services



Source: IEEE Global Spec

# Top Agriculture Products Purchased

- Pickup Trucks
- Utility Vehicles or Compact Tractors
- Livestock Trailers
- Handcarts
- Manure Spreaders
- Composters





#### **Leading Farm Commodities**

- Corn \$46,885,717
- Soybeans \$42,008,036
- Dairy products & milk -\$34,543,067
- Broilers \$25,935,852
- Wheat \$8,863,094
- Almonds \$5,158,160
- Cotton \$4,459,269

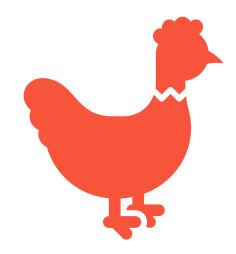
- Potatoes \$3,506,366
- Apples \$3,462,460
- Lettuce \$2,880,973
- Rice \$2,424,670
- Strawberries \$2,335,910
- Tomatoes \$2,055,777
- Oranges \$1,927,270



#### **Leading Farming Brands**

- Cargill
  - Metal supplier
- Tyson Foods
  - Food manufacturing supply
- BRF
  - Food company based out of Brazil
- Alltech
  - Operates in animal feed, meat, brewing, and distilling
- JBS
  - Food processing company
- Bachoco
  - Poultry producer
- Foster Farms
  - Poultry company





#### **Major Livestock Data**

- Cattle/Calves \$63,944,678
- Hogs \$18,856,798
- Chicken Eggs \$6,483,307
- Turkey \$6,190,104
- Other Animals & Products \$5,845,466
- Farm Chickens \$84,869

Total of animal and animal products' revenue in 2016 was \$162,858,224.



#### Household Income of Farm Operators

- Farm households are not low income - they generally have an income level at, or above, median.
- Self-employment or wage/salary jobs are the main source of income for farm households.
- Some farm households have other jobs or income streams.

Farm households with								
	Income below U.S. median (\$59,039)	Wealth below U.S. median (\$97,000)						
Farm type	Percent of farm households							
Small Family Farms								
Retirement	48.7	2.8						
Off-farm occupation	27.2	3.3						
Low-sales	55.7	2.6						
Moderate-sales	32.0	2.9						
Midsize family farms	21.8	3.5						
Large-scale family farms								
Large	14.0	3.5						
Very large	15.0	1.8						
All family farms	37.8	3.0						





#### Yearly Spend on Agriculture & Farming

- In 2016, the U.S. total farm expenditure average is \$169,035/farm.
- On average, U.S. farm operations spent the following:
  - Feed \$27,092
  - Livestock, poultry, and related expenses - \$19,491
  - Farm services \$20,319
  - Labor \$16,616

#### Farm Production Expenditures by Farms Reporting, Average per Farm, and Total – United States: 2015 and 2016

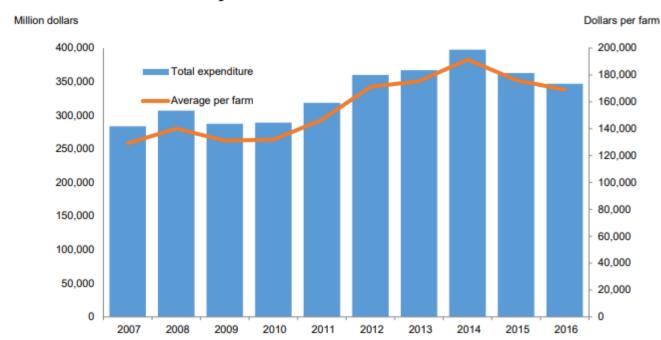
[For definitions of terms used in this table, see Terms and Definitions. Excluding Alaska and Hawaii. Totals may not add due to rounding]

Expenditure	Farms reporting		Average per farm		Total expenditures	
	2015	2016	2015	2016	2015	2016
	(percent)	(percent)	(dollars)	(dollars)	(million dollars)	(million dollars)
Livestock, poultry and related expenses	25.3	25.7	22,047	19,491	45,400	40,000
Feed	56.8	57.3	28,408	27,092	58,500	55,600
Farm services	92.3	91.1	20,202	20,319	41,600	41,700
Rent	29.4	30.0	15,054	14,521	31,000	29,800
Agricultural chemicals	41.6	45.4	7,090	7,407	14,600	15,200
Fertilizer, lime and soil conditioners	51.4	50.4	12,383	11,451	25,500	23,500
Interest	32.7	32.0	4,613	4,434	9,500	9,100
Taxes	99.5	99.5	6,216	5,799	12,800	11,900
Labor	27.4	25.8	15,443	16,616	31,800	34,100
Fuel	85.1	83.6	5,973	5,506	12,300	11,300
Farm supplies and repairs	80.7	80.4	9,081	8,576	18,700	17,600
Farm improvements and construction	50.9	48.8	7,818	7,065	16,100	14,500
Tractors and self-propelled farm machinery	14.5	13.0	5,779	5,165	11,900	10,600
Other farm machinery	16.3	15.1	2,962	2,436	6,100	5,000
Seeds and plants	39.2	36.3	10,344	10,623	21,300	21,800
Trucks and autos	13.3	11.6	2,428	2,144	5,000	4,400
Miscellaneous capital expenses	4.9	5.2	340	390	700	800
Total farm production expenditures	100.0	100.0	176,181	169,035	362,800	346,900



#### Farm Production Expenditures

Farm Production Expenditures, Total and Average Per Farm by Year - United States: 2007-2016

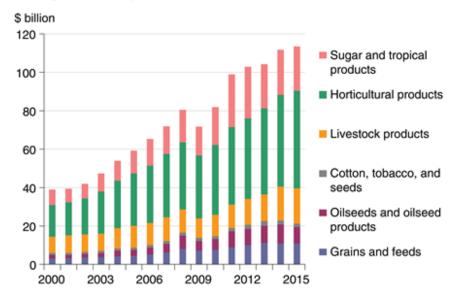




#### Risks for Agriculture in the U.S.

- An increase in agricultural imports from other countries may introduce risk to U.S. farmers and the agriculture industry.
- 44% of U.S. agricultural imports are horticultural products, including:
  - Fruits
  - Vegetables
  - Tree nuts
  - Wine
  - Essential oils
  - Nursery stock
  - Cut flowers
  - Hops
- 20% of U.S. agricultural imports are:
  - Sugar
  - Coffee
  - Cocoa
  - Rubber
- Imports of vegetable oils, processed grain products, red meat, and dairy products have grown significantly in recent years.

#### U.S. agricultural imports, 2000-15



Source: USDA, Economic Research Service using data from U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Database.

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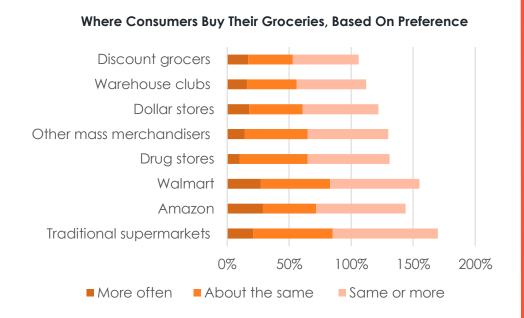


Source: USDA



#### **How Consumers Purchase Groceries**

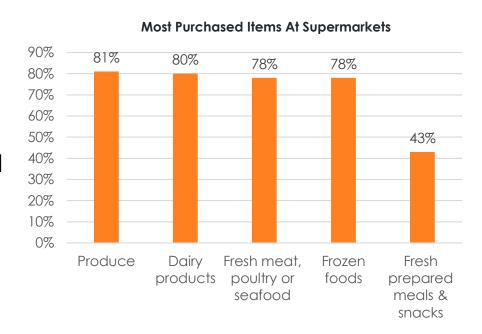
- Agriculture, food, and related industries contributed 5.5% to U.S. (GDP) in 2015.
- Americans' expenditures on food equates to 13% of household budgets, on average. (includes expenditures on food at home and away from home)
- U.S. consumers spend nearly \$650 billion on groceries each year.





#### Top Agriculture Products Purchased by Consumers

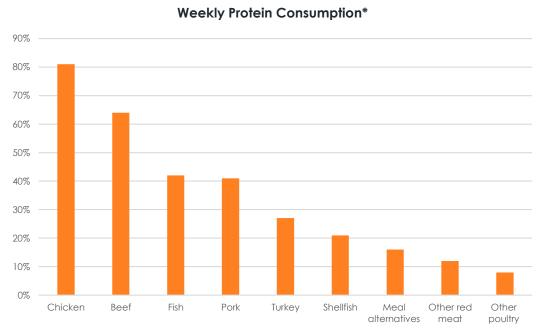
- Produce, dairy, and meat are the top items purchased at supermarkets.
- 75% of shoppers think the quality of a supermarket can be judged by its produce.





#### **Consumer Trends: Protein Consumption**

- Poultry is the most consumed animal protein, driven primarily by chicken.
- 81% of consumers eat chicken weekly.



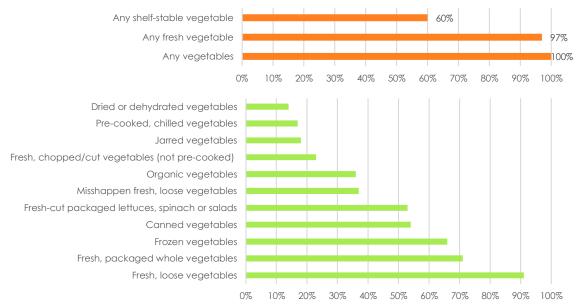
\*Based on weekly consumption.



#### Consumer Purchasing Trends: Produce

- 97% of consumers purchase some type of fresh vegetable.
- Frozen and shelf-stable vegetables are purchased at a lower rate.
- Brands in non-fresh segments can reinforce messages of convenience and extend these through packaging that includes multiple-sized and sealed portions for increased freshness and flexibility.
- Brands can increase appeal to consumers by adding globallyinspired and restaurant-style recipe suggestions on packaging and social media.

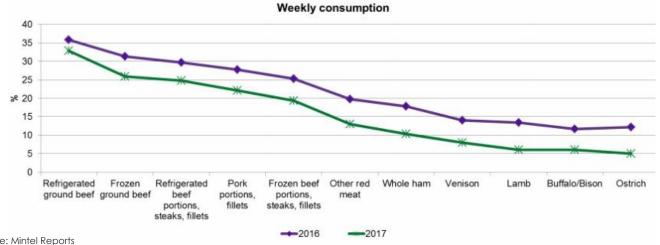
#### Vegetable Purchase Data





#### Consumer Purchasing Trends: Red Meat

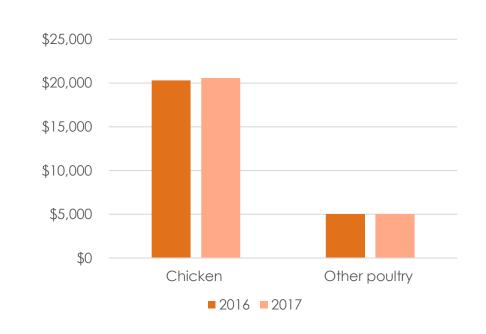
- 2016 red meat sales were 12% ahead of the 2011 performance.
- Since 2016, consumers appear to be embracing other proteins (primarily poultry) and protein alternatives, which are perceived as healthier and give consumers fewer concerns related to saturated fat and cholesterol.





# Consumer Purchasing Trends: Poultry

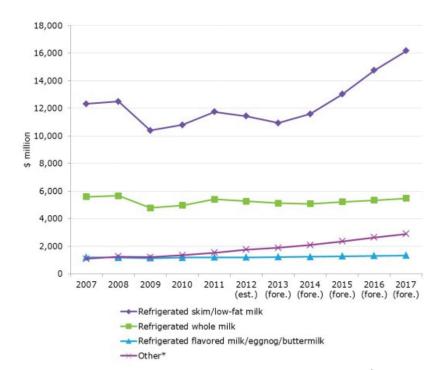
- Since 2016, the poultry category has experienced growth stemming from falling prices of both poultry and other poultry products.
- Product innovation that strengthens an already favorable reputation for healthfulness, adaptability, and variety may drive future success in the category.





# **Consumer Purchasing Trends: Dairy**

- Dairy milk remains the most popular segment in the milk category.
- There is an overlap between respondents who purchase dairy milk and those who purchase non-dairy milk for their households, suggesting that many shoppers are buying more than one type of milk.
- The growth in the variety of the types of milk purchased should be considered a welcome opportunity for milk manufacturers to expand usage occasions and locations beyond already-known frequent usage occasions (e.g. at-home breakfast consumption).





#### RURAL PARTNERSHIP

C & D county consumers are relatively untapped, very responsive, and key to the bottom line

TSWRural has the resources, expertise, and experience to reach the highly-desirable rural market



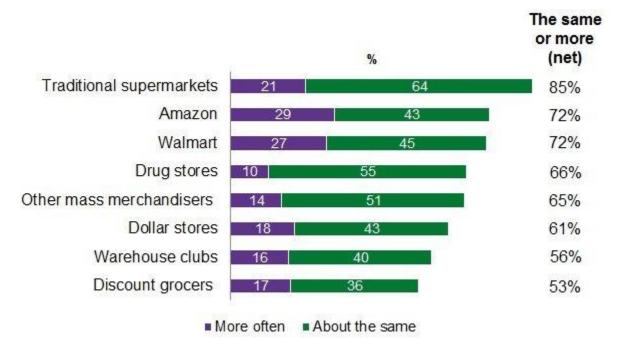




Figure 4: Select items shopped at supermarkets/discount grocers\*, August 2017 Base: 1,940 internet users aged 18+ who are responsible for grocery shopping in household and have shopped at any of the specific stores

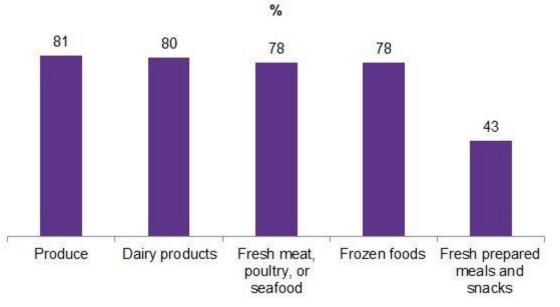




Figure 4: Meat consumption frequency, at least once a week, September 2017

Base 1,786 internet users aged 18+ who purchased poultry in the last 3 months

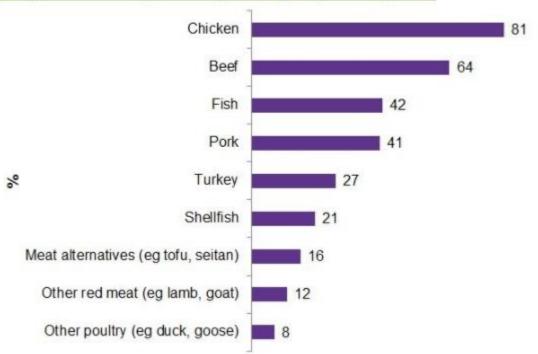
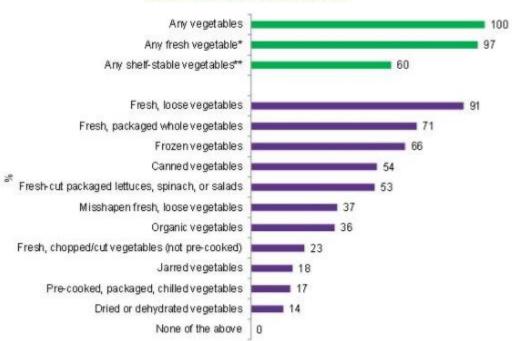




Figure 2: Vegetable purchase, March 2017

Base: 2,000 internet users aged 18+





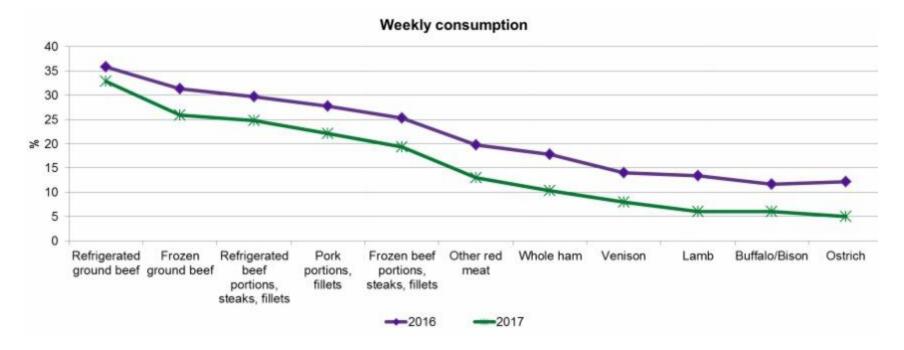




Figure 2: Total U.S. retail sale of dairy and non-dairy milk, by segment, 2007-17

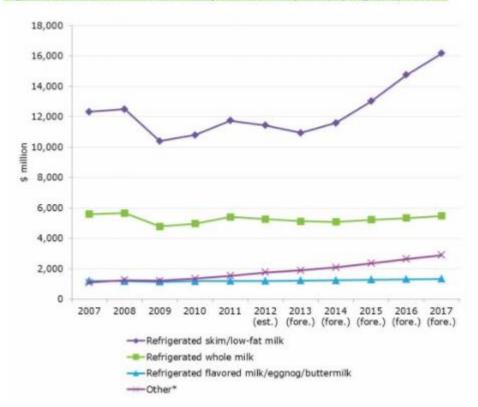




Figure 1: Total US retail sales and forecast of poultry, by segment, at current prices, 2016-17

