### Plant-Based Food Retail Market Overview

Presented by: Caroline Bushnell & Kyle Gaan





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#### Presenters for today's webinar



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### The Good Food Institute

Accelerating the shift to a sustainable, healthy, and just food system through three key areas of work:



#### Science and Technology

Advancing and open-sourcing the foundational science of plant-based and cultivated meat



#### Corporate Engagement

Consulting with the world's biggest food companies to help them capitalize on opportunities in the plant-based market

#### RAA AAA

#### Policy

Advocating for fair regulation of plant-based and cultivated meat and lobbying for governmental investment in sustainable protein R&D



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We act as a force multiplier, bringing the expertise of our departments to the rest of the world.



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#### 90+ staff in 6 countries

How will we feed 10 billion people by 2050?



#### The solution? Make meat a better way



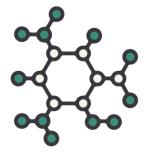
### **GFI** services



#### Marketing & Strategy

- Global & regional market overviews
- Syndicated retail sales data
- Industry mapping
- Primary consumer research

- Consumer trends and insights
- Innovation guidance
- Menu and merchandising strategy
- Product marketing & positioning



#### **Technical Expertise & Guidance**

- Plant-based & cultivated technology
- Recombinant protein & synthetic biology
- Technical plan or research plan review

- Technical insights and exploration
- Research grant program
- Funding & investment opportunities

### U.S. plant-based market overview

#### **Plant-based market overview**

Only products that are plant-based substitutes are included in this data. Inherently plant-based foods, such as chickpeas and kale, are not included. There are 7 high-level categories:



Tofu and tempeh



Plant-based meat



Plant-based meals



Plant-based condiments and dressings



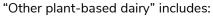
Plant-based milk



Plant-based eggs



Other plant-based dairy



- Cheese
- Yogurt
- Ice cream and frozen novelty
- Butter
- Creamers
- Ready-to-drink beverages
- Dairy spreads, dips, sour cream, and sauces

# SPINS data covers the Natural, Specialty Gourmet, and MULO channels

#### Natural

#### **Specialty Gourmet**

- Full-format stores with \$2 million+ in annual sales and at least 50%+ of sales from natural/organic products
- Includes co-ops, associations, independents, large regional chains (excludes Whole Foods & Trader Joes)
- Examples: Sprouts, Erewhon, Earth Fare

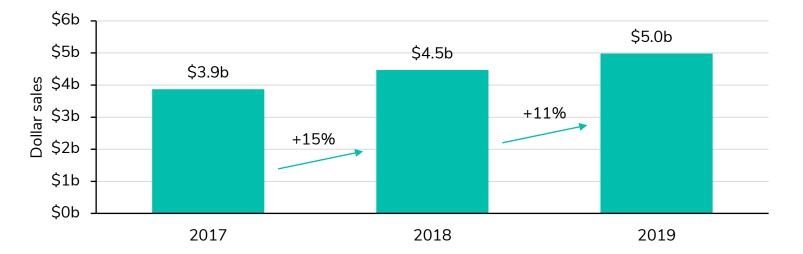
- Full-format supermarkets with more than \$2 million in annual sales
- SPINS-defined specialty items comprise at least 25% of overall volume
- High-end, experiential stores featuring full-service and fresh departments such as prepared foods, butchers, and on-site bakeries
- Examples: Gelson's, Heinen's, Busch's

#### MULO

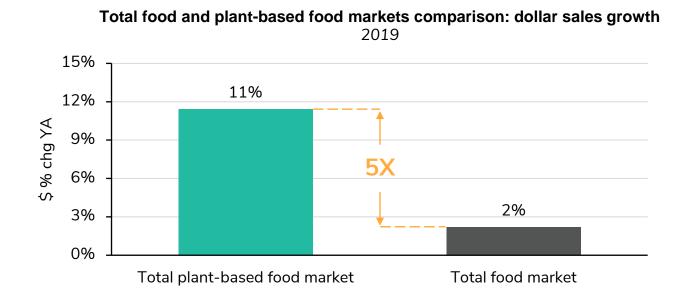
- The Conventional Multi Outlet Channel is comprised of over 104,000 retail locations spanning Grocery, Drug, Mass, Dollar, Military, and Club
- Includes 250+ corporate totals
  and banners
- SPINSscan Conventional provides reporting on Conventional Food, Drug, Mass and Multi Outlet Channels
- Examples: Publix, Walmart, Kroger, Target

#### U.S. retail sales of plant-based food are worth \$5 billion

Total U.S. plant-based food market



## Plant-based foods grew 5 times faster than total food sales over the past year



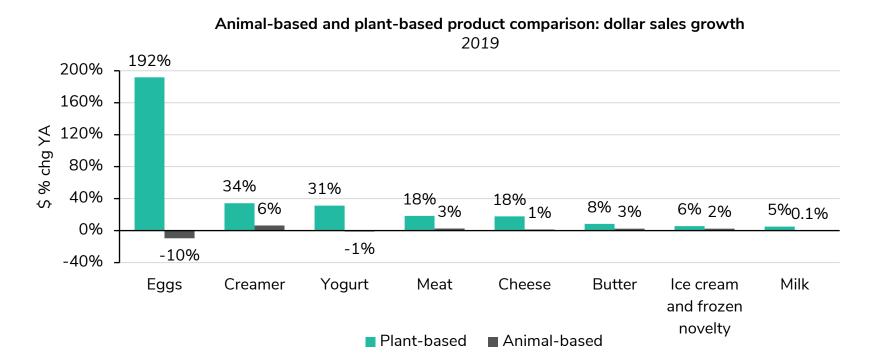
Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 104 weeks ending 12-29-2019

### Plant-based milk is the most developed category at \$2 billion

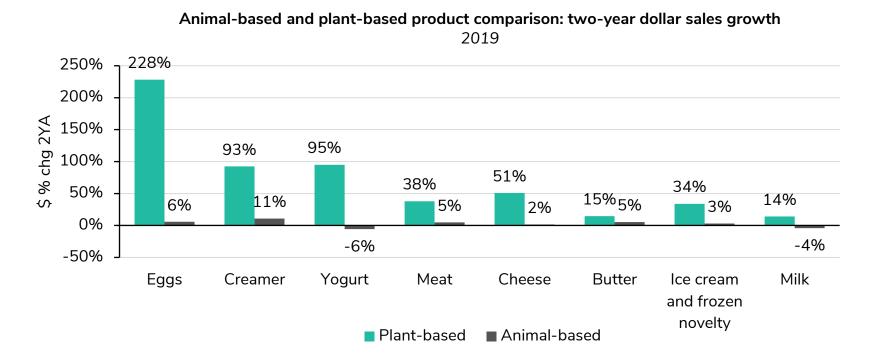
2019 \$2.4b 48% \$2.0b 192% \$1.8b 36% \$1.4b **Dollar sales** % chg YA \$1.2b 24% \$939m ٠ \$377m \$128m \$0.6b 12% \$64m ŝ \$10m ٠ \$0.0b 0% -\$0.6b -12% Plant-based Other plant-Plant-based Plant-based Tofu and Plant-based Plant-based milk based dairy meat meals tempeh condiments eggs and dressings Dollar sales \$ % chq YA

Total U.S. plant-based food dollar sales and dollar sales growth by category

## Plant-based food sales growth outperforms animal-based food sales growth across key categories



## The two year sales growth comparison shows a clear trend towards plant-based products



### Plant-based milk has the greatest share of total market; other dairy categories are gaining share

Plant-based share by category 2019 16% 14% 12% % share 8% 6% 5% 4% 4% 3% 1% 1% 0.2% 0% Milk Butter Creamer Yogurt Ice cream and Meat\* Cheese Eggs frozen novelty

Note: SPINS does not report non-UPC meat counter sales. To account for this, the plant-based meat total retail share calculation uses the \$95 billion total meat market size reported by Nielsen, as this number includes both retail packaged meat sales and non-UPC meat counter sales

Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 52 weeks ending 12-29-2019; Nielsen (2019), The F Word: Flexitarian Is Not a Curse to the Meat Industry

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# There is a \$12 billion opportunity for plant-based meat to reach market share parity with plant-based milk

Plant-based milk and meat shares of total categories 2019 15% 14% 12% % share 9% \$12 billion opportunity 6% 2% 3% 1% 0% Plant-based meat: Plant-based milk: Plant-based meat: share of retail milk share of retail packaged meat share of total retail meat

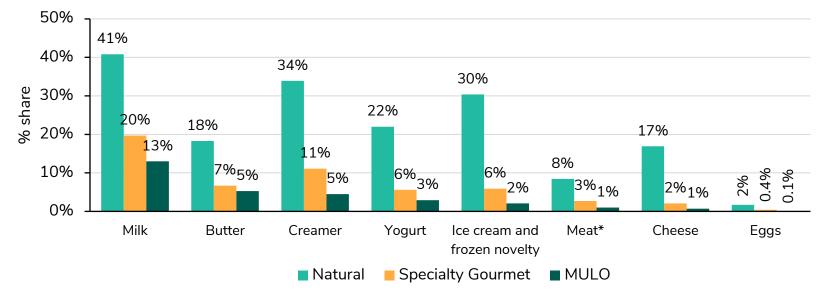
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## Plant-based foods have the largest share of their respective categories in the Natural channel

Plant-based share by category and channel

2019

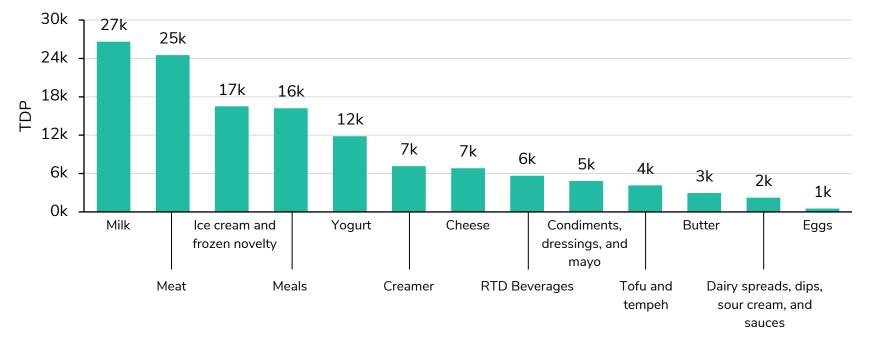


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Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 52 weeks ending 12-29-2019; Nielsen (2019), The F Word: Flexitarian Is Not a Curse to the Meat Industry

## Plant-based milk has the highest distribution, with room for growth across categories

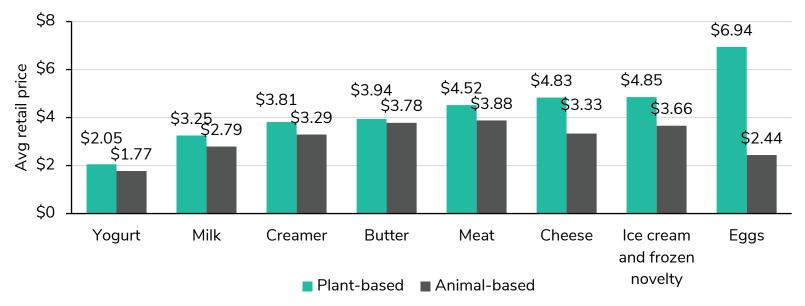
Total distribution points by plant-based category 2019



Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 52 weeks ending 12-29-2019

# Plant-based products are sold at a premium when compared to their animal-based counterparts

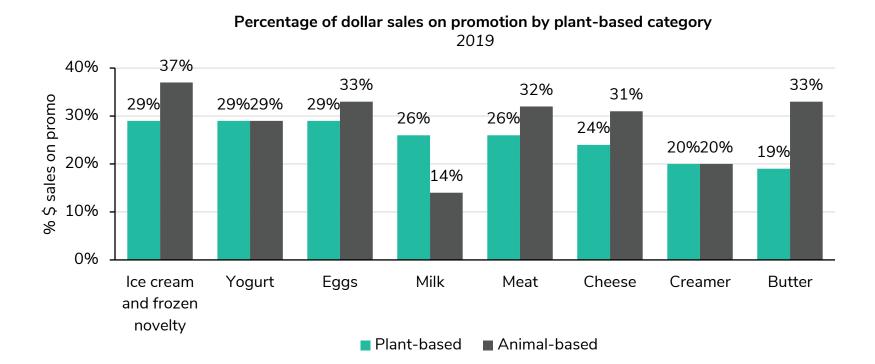
Animal-based and plant-based product comparison: average retail price 2019



Note: Animal-based meat average price calculated using Nielsen August 2018 retail and counter sales data

Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 52 weeks ending 12-29-2019

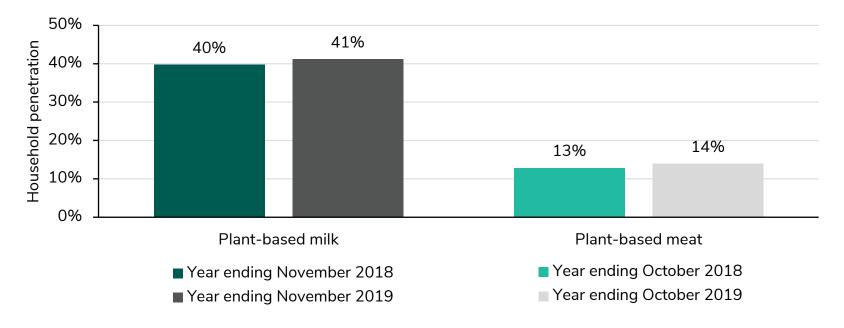
# Plant-based milk is the only category sold on promotion at a higher rate than animal-based categories



### **Purchasing dynamics**

#### Household penetration of plant-based milk and plantbased meat stands at 41% and 14%, respectively

Household penetration of plant-based milk and plant-based meat

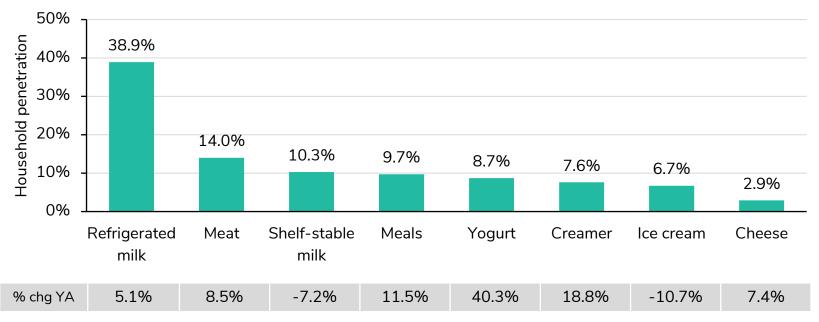


Source: IRI panel, total store view, all outlets, 52 weeks ending 12-01-2019; The Food Industry Association & IRI, "Understanding the Plant-Based Consumer" (January 2020) - IRI panel, all outlets, 52 weeks ending 11-03-19, NBD aligned

### Many plant-based categories have room to grow in terms of household penetration

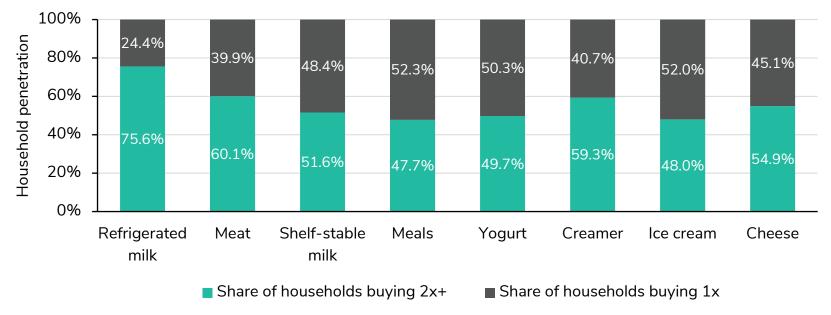
Household penetration of plant-based products

2019



# The majority of households are purchasing refrigerated plant-based milk and plant-based meat 2 or more times

#### Household penetration of plant-based products by 1x and 2x buyers 2019

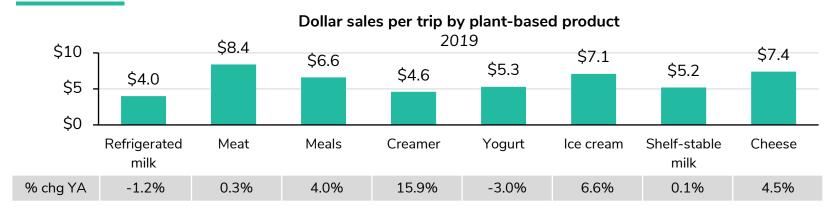


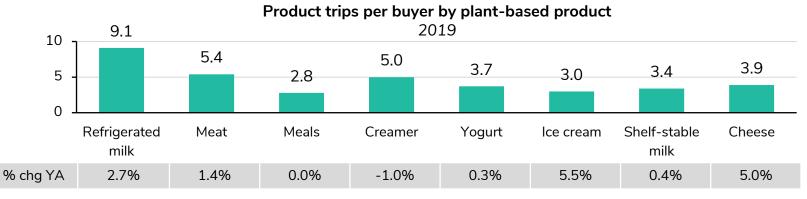
## Plant-based meat and refrigerated plant-based milk have the highest dollar sales per buyer

2019 \$50 \$45.9 **Dollar sales per buyer** \$36.5 \$40 \$28.4 \$30 \$22.9 \$21.2 \$19.5 \$18.2 \$17.3 \$20 \$10 \$0 Refrigerated Shelf-stable Meat Cheese Creamer Yogurt Meals Ice cream milk milk Dollar per \$0.8 \$0.5 \$2.5 \$2.9 \$2.4 -\$0.5 \$0.7 \$0.1 buyer chq

Dollar sales per buyer by plant-based product

#### Plant-based meat, ice cream, and cheese experienced increases in both dollar sales per trip and product trips per buyer

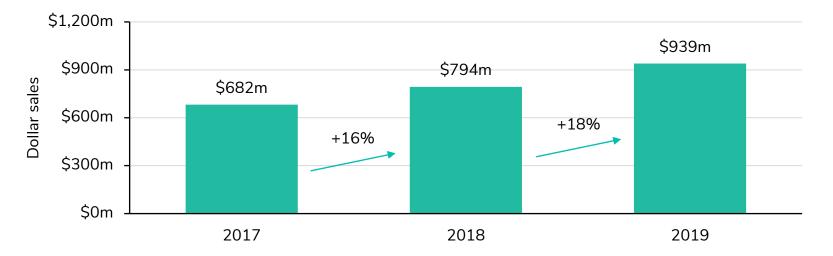




### **Plant-based meat**

# U.S. retail sales of plant-based meat are worth \$939 million





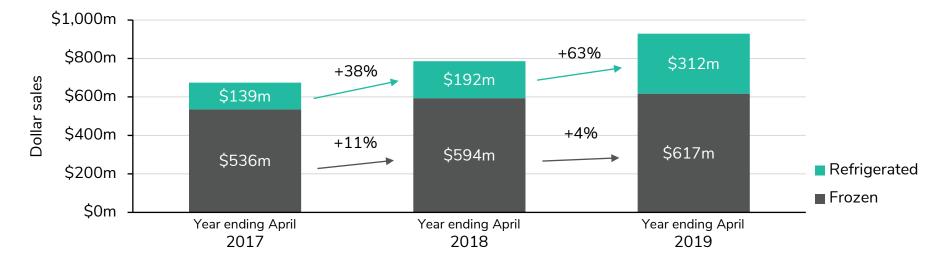
Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 104 weeks ending 12-29-2019

# Plant-based meat category growth is being driven by refrigerated plant-based meat sales

Plant-based meat dollar sales and dollar sales growth by store section 2019 \$750m 75% \$617m \$600m 60% Dollar sales \$450m 45% פ \$312m ΰ \$300m 30% ŝ \$150m 15% \$10m \$0m 0% Shelf-stable Frozen plant-based meat Refrigerated plant-based meat plant-based meat 

# Refrigerated plant-based meat now makes up 33% of category sales and year over year growth is increasing

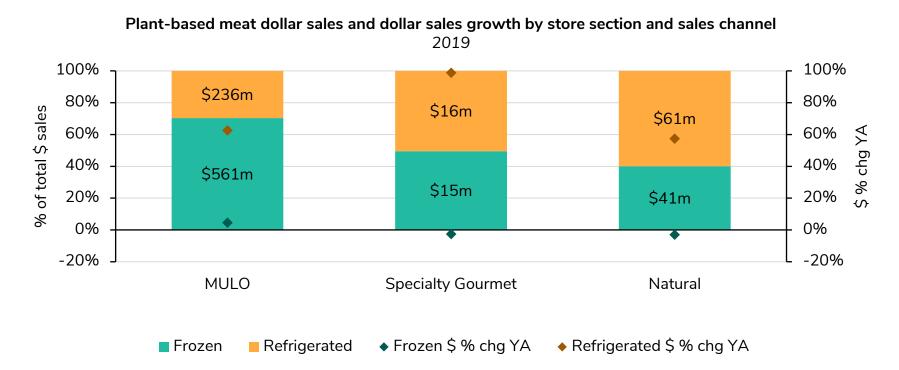
U.S. plant-based meat market by frozen and refrigerated categories



Note: Shelf-stable plant-based meat products excluded from this analysis

Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 104 weeks ending 12-29-2019

## Refrigerated plant-based meat accounts for 60% of sales in the Natural channel

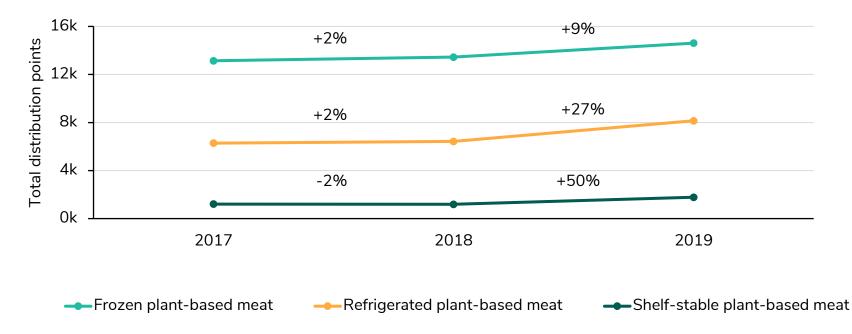


Note: Shelf-stable plant-based meat products excluded from this analysis

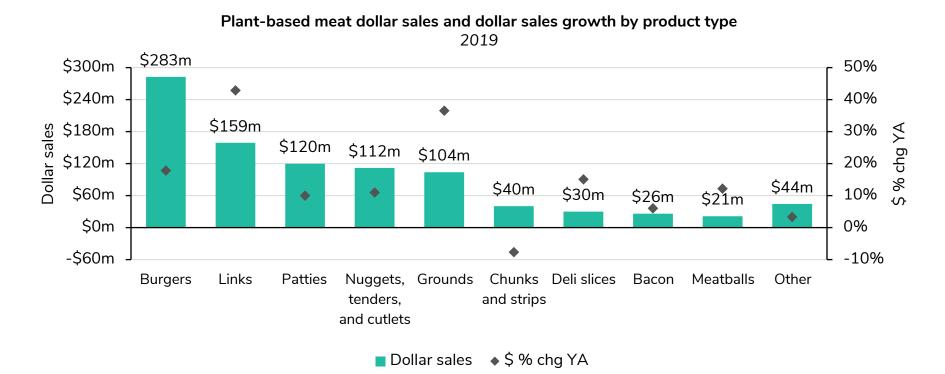
Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 52 weeks ending 12-29-2019

## Total distribution points for plant-based meat have increased across all store sections

Plant-based meat total distribution points by department



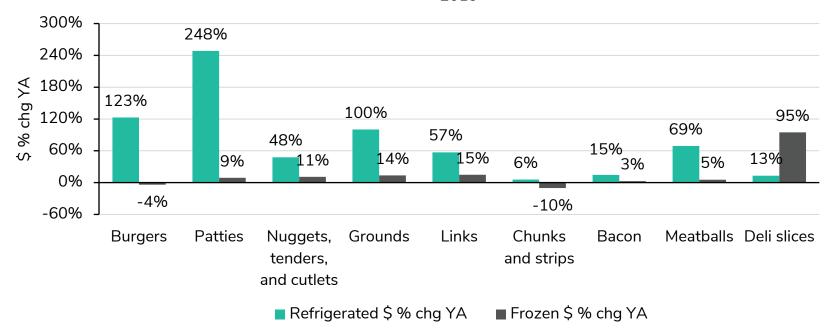
#### Burgers have the largest share of plant-based meat sales; links are the fastest growing



Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 104 weeks ending 12-29-2019

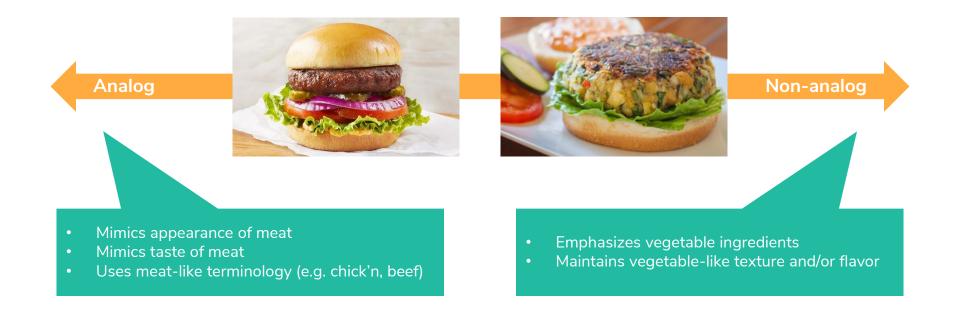
#### Refrigerated sales are driving growth across most plantbased meat product types

Plant-based meat product type dollar sales growth by store section 2019

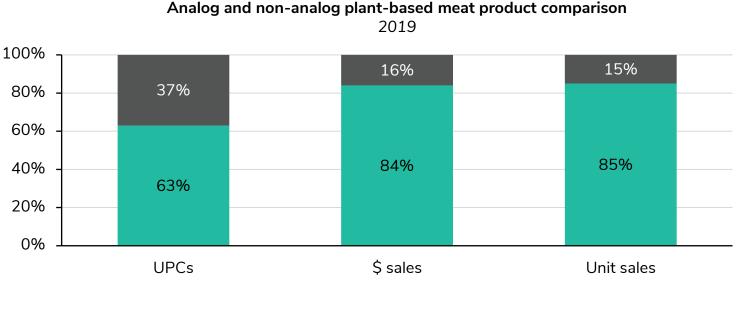


Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 52 weeks ending 12-29-2019

Plant-based meat products vary in the degree to which they are analogs or non-analogs of animal-based meat

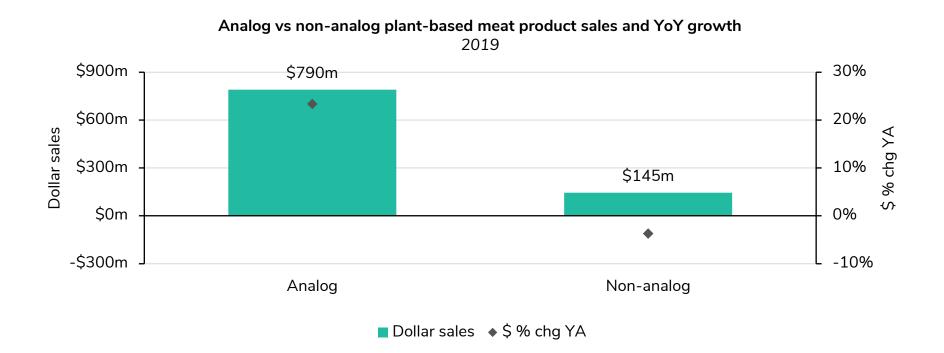


# Analog plant-based meat products make up slightly more than 60% of UPC's but almost 85% of dollar sales



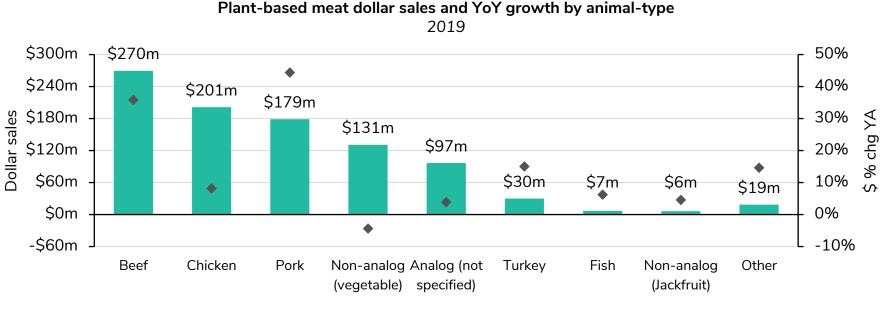
■ Analog ■ Non-analog

### Products that are analogous to meat are growing faster than non-analogs



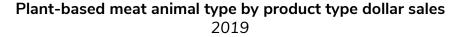
Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 52 weeks ending 12-29-2019

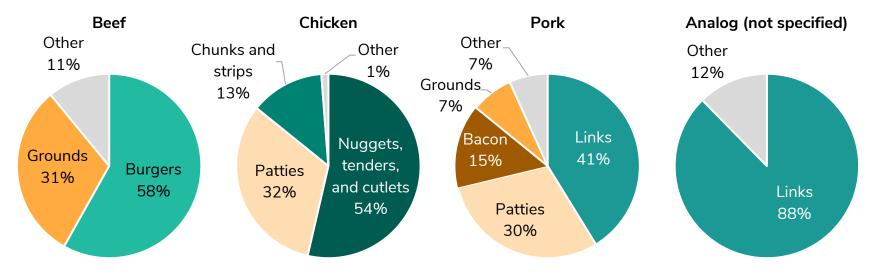
### Plant-based versions of beef, chicken, and pork make up almost 70% of plant-based meat sales



■ Dollar sales ◆ \$ % chg YA

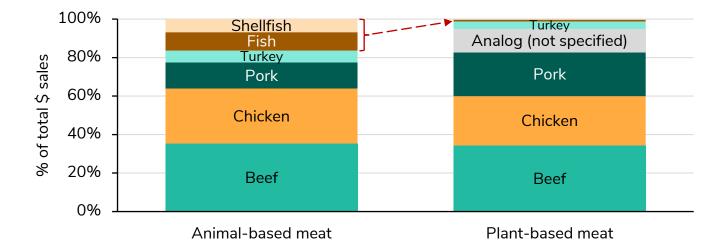
# Beef-type products are concentrated in burgers and grounds, chicken-type products in nuggets and patties





Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 52 weeks ending 12-29-2019

### Fish and shellfish are underrepresented in the plant-based meat market



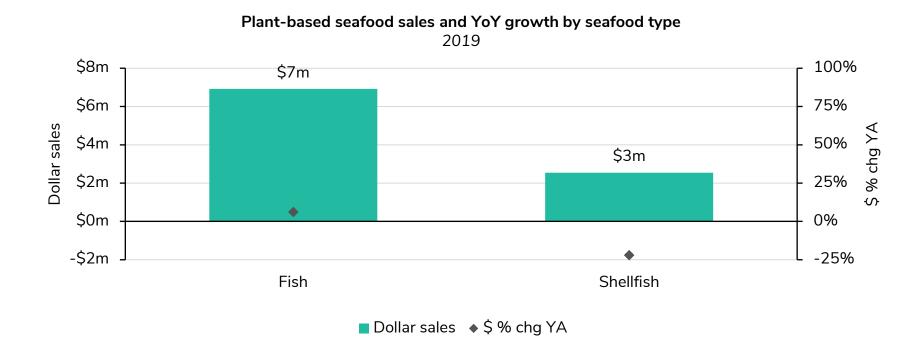
Animal-based and plant-based meat comparison: dollar sales by animal-type

Note: Animal-based meat dollar sales for year ending August 2018; plant-based meat dollar sales for year ending December 2019

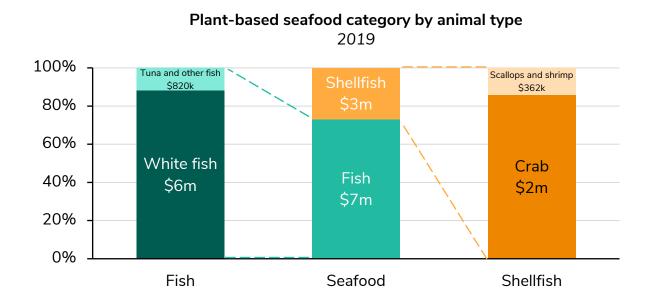
Source: Nielsen custom defined data set, xAOC + WFM, 52 weeks ending 8-11-2018; SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan

Conventional Multi Outlet (powered by IRI), 52 weeks ending 12-29-2019

## Plant-based fish makes up almost 70% of the plant-based seafood category



#### The plant-based fish and shellfish categories are both dominated by one animal type

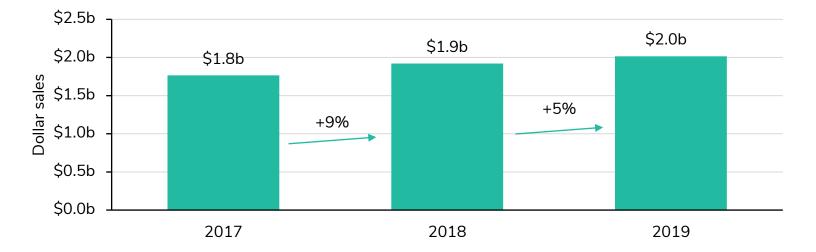


Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 52 weeks ending 12-29-2019

#### **Plant-based milk**

#### U.S. retail sales of plant-based milk are worth \$2 billion

#### U.S. plant-based milk market



Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 104 weeks ending 12-29-2019

## Refrigerated plant-based milk sales make up the majority of the category and are driving category growth

U.S. plant-based milk dollar sales and dollar sales growth by store section 2019 \$2,400m 15% \$1.8b \$1,600m 10% Dollar sales chq \$800m 5% \$211m % \$0m 0% -\$800m -5% Refigerated plant-based milk Shelf-stable plant-based milk

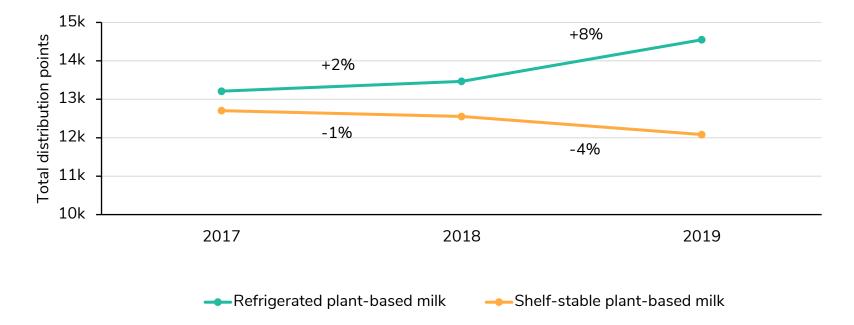
■ Dollar sales ◆ \$ % chg YA



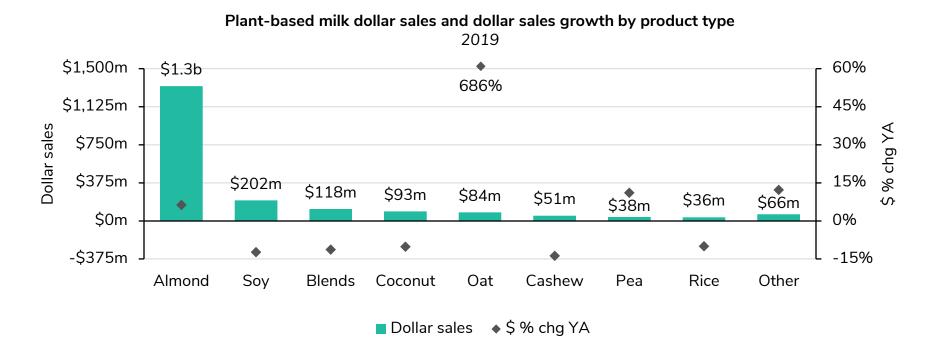


#### Refrigerated plant-based milk TDP growth has increased as volume moves to the fresh dairy case

Plant-based milk total distribution points by department

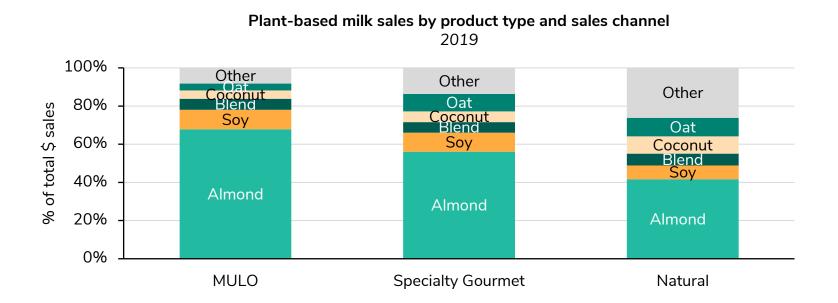


## Almond milk makes up the majority of plant-based milk sales, but oat milk grew at 686% over the past year



Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 52 weeks ending 12-29-2019

#### Oat milk makes up a larger proportion of Natural channel sales



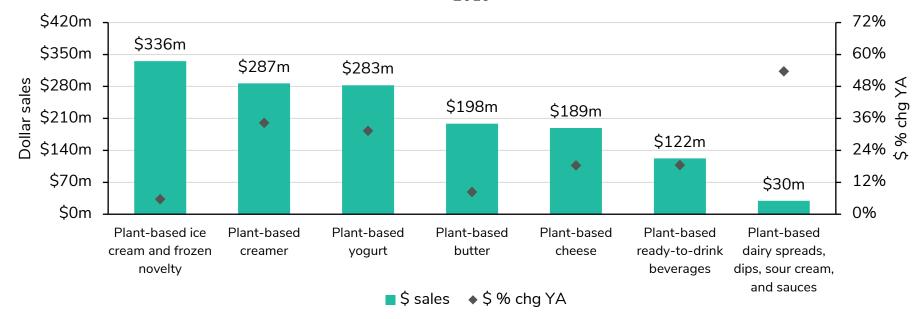
Note: "Other" category includes rice, pea, cashew, hemp, and flax milks

Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 52 weeks ending 12-29-2019

#### **Plant-based other dairy**

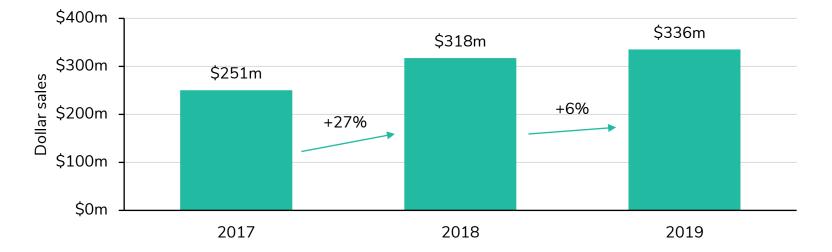
## Plant-based ice cream and frozen novelty products are the largest of the other plant-based dairy categories

#### Other plant-based dairy category dollar sales and dollar sales growth 2019



### U.S. retail dollar sales of plant-based ice cream and frozen novelty products are worth \$336 million

U.S. plant-based ice cream and frozen novelty market



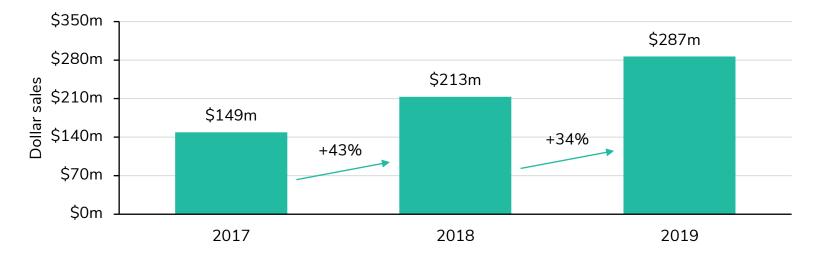
### Plant-based ice cream makes up the majority of the category, although sales have stagnated

U.S. plant-based ice cream and frozen novelty dollar sales and dollar sales growth by store section 2019 \$360m 36% \$247m \$270m 27% **Dollar sales** \$180m 18% chg \$61m \$90m 9% % \$27m ŝ \$0m 0% -\$90m -9% Plant-based ice cream Plant-based novelties Plant-based pies and other desserts

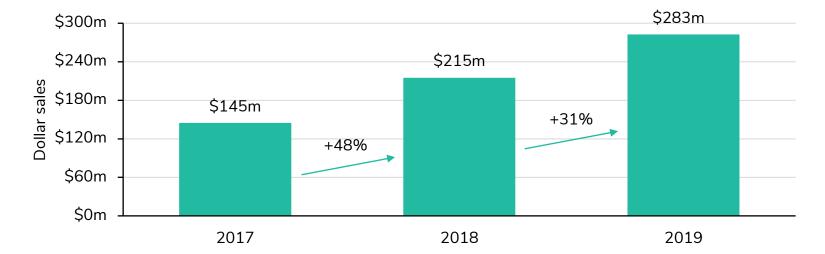
■ Dollar sales ◆ \$ % chg YA

### U.S. retail sales of plant-based creamer grew 34% to reach \$287 million

U.S. plant-based creamer market

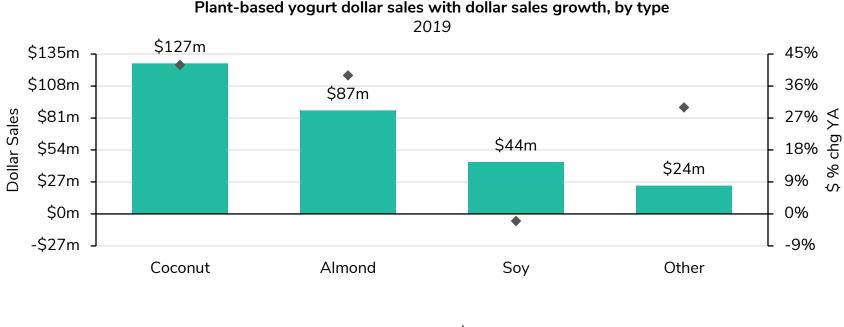


#### U.S. retail sales of plant-based yogurt grew 31% to reach \$283 million



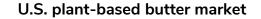
U.S. plant-based yogurt market

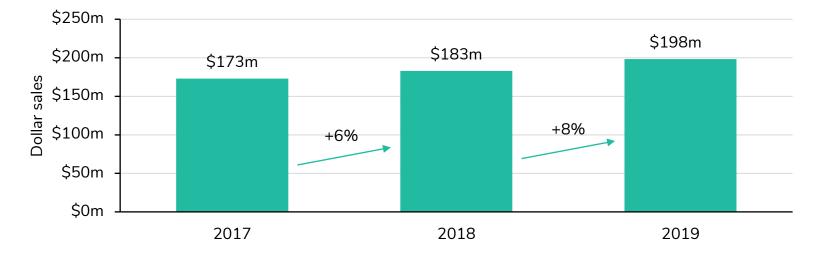
### Coconut and almond yogurts make up ~76% of category sales, and are growing at 42% and 39% respectively



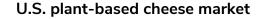
Dollar sales  $\Rightarrow$  \$% chg YA

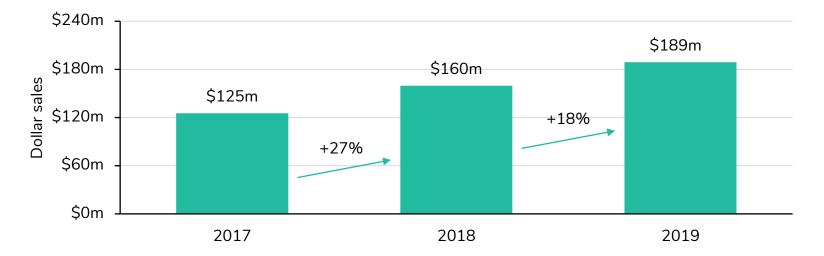
#### U.S. retail sales of plant-based butter grew 8% to reach \$198 million



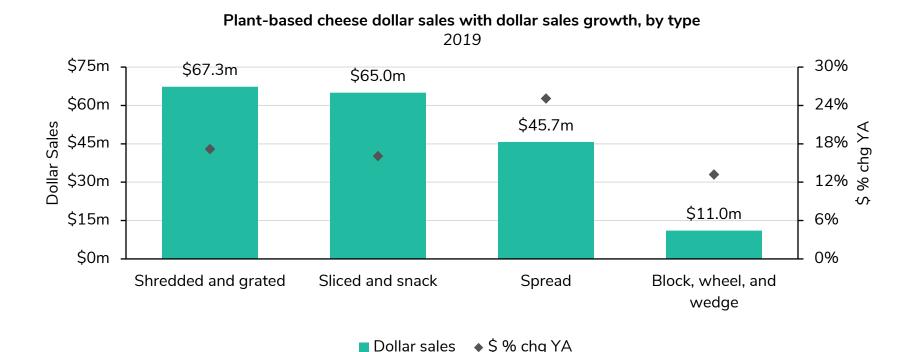


#### U.S. retail sales of plant-based cheese are worth \$189 million





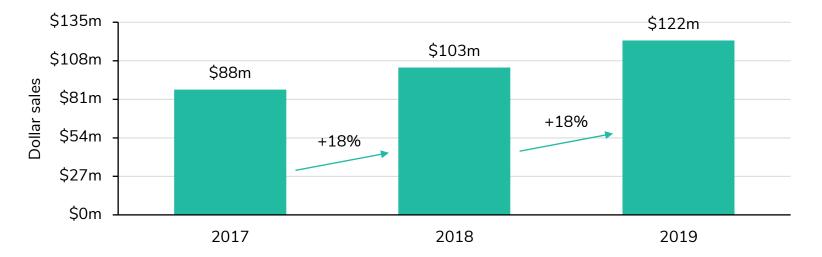
#### Shredded cheeses and sliced cheeses make up 70% of category sales and are growing at 17% and 16%, respectively



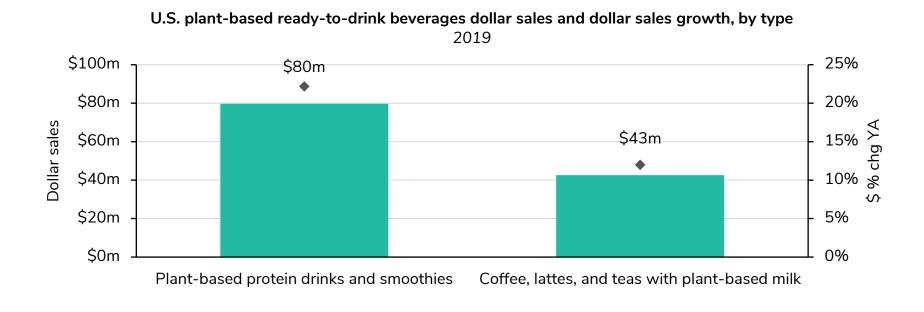
Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 52 weeks ending 12-29-2019

### U.S. retail sales of plant-based ready to drink beverages grew 18% to reach \$122 million

U.S. plant-based ready-to-drink beverages market



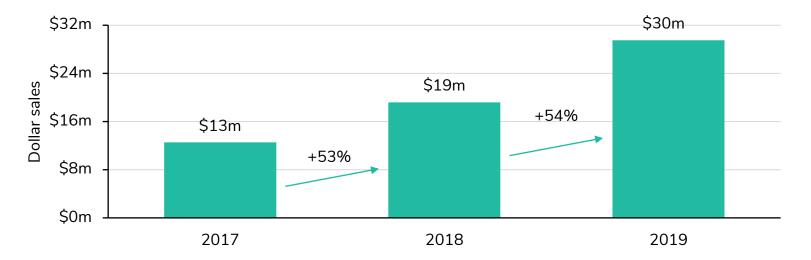
#### Protein drinks and smoothies make up 65% of plant-based RTD beverage sales and are driving category growth



■ Dollar sales ◆ \$ % chg YA

### U.S. retail sales of plant-based dairy spreads, dips, sour cream, and sauces grew 54% to reach \$30 million

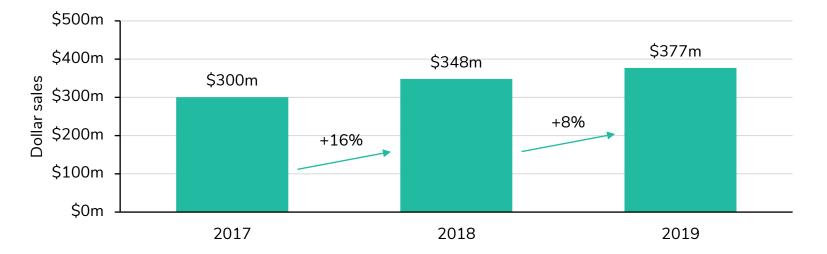
U.S. plant-based dairy spreads, dips, sour cream, and sauces market



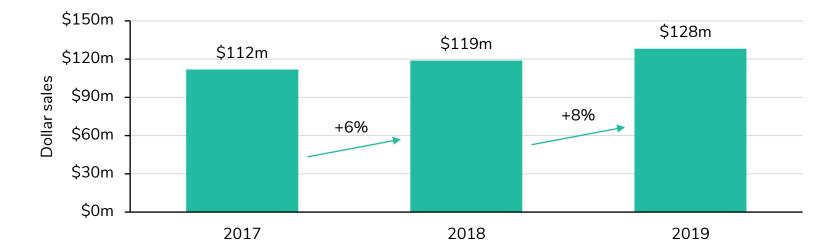
#### **Other plant-based categories**

### U.S. retail sales of plant-based meals grew 8% to reach \$377 million

U.S. plant-based meals market



## U.S. retail sales of tofu and tempeh grew 8% to reach \$128 million

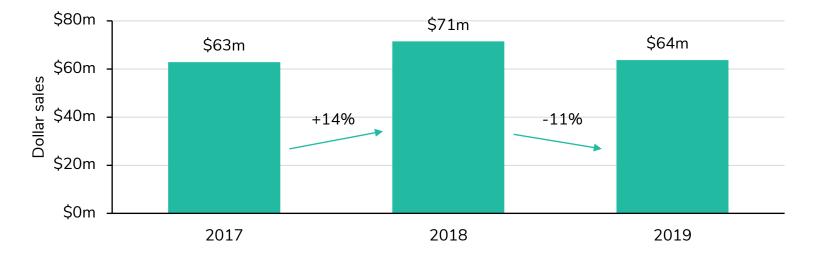


U.S. tofu and tempeh market

Source: SPINSscan Natural and Specialty Gourmet (proprietary), SPINSscan Conventional Multi Outlet (powered by IRI), 104 weeks ending 12-29-2019

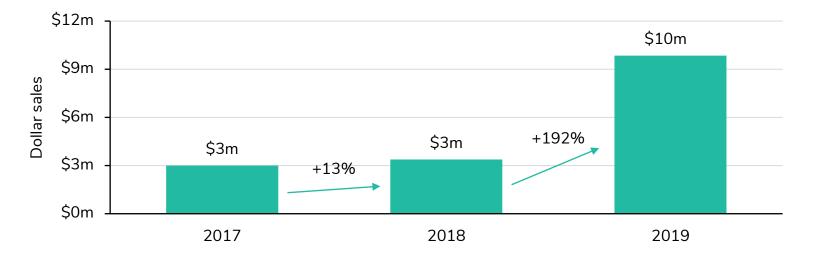
### U.S. retail sales of plant-based condiments, dressings, and mayo declined 11% to \$64 million

U.S. plant-based condiments, dressings, and mayo market



## U.S. retail sales of plant-based eggs are worth \$10 million and are rapidly growing

U.S. plant-based eggs market



#### Key takeaways

- 1. The plant-based food market reached \$5 billion in sales and grew at 11% over the past year, 5 times faster than total food sales growth
- 2. Plant-based categories are experiencing both high repeat purchase rates and an increasing percentage of repeat buyers
- 3. Refrigerated product sales are driving growth in the plant-based milk, meat, and egg categories
- 4. Plant-based products benefit from adjacency and should be displayed sideby-side with their animal-based counterparts
- 5. Analog plant-based products that closely match conventional products' taste, appearance, and packaging are driving plant-based food growth
- 6. There is room for innovation in whole muscle products that resemble premium animal cuts, particularly in chicken and fish



#### Thank you for attending our webinar!



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