

Frozen Food Sales Amid COVID-19

U.S. Consumer Engagement
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Key Findings

Since the onset of coronavirus in the United States, grocery retailing conditions have been unlike any ever experienced in recent history. Unprecedented pantry, fridge and freezer loading by consumers across the United States emptied stores for days and weeks on end, resulting in incredible sales surges and widespread out-of-stock conditions. Whereas non-edibles surged early on, food sales took over come March 15 and have been highly elevated ever since. Frozen foods quickly emerged as a growth leader, with nearly double the typical sales during the top panic purchasing week ending March 22.

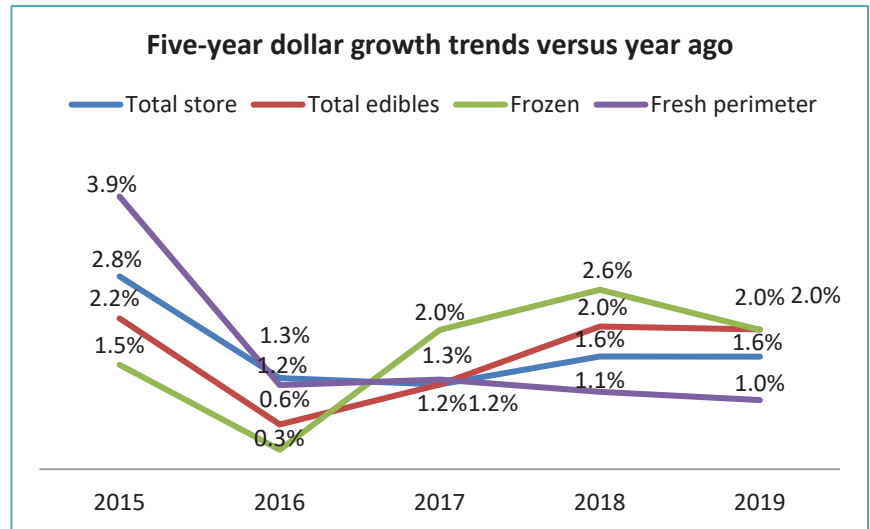
Five weeks since the onset of the coronavirus pandemic in the U.S. in early March...

- 90% of consumers are eating more meals that are prepared at home versus pre-pandemic and, in addition, 73% of consumers are taking more time to prepare meals than usual. Both present big opportunities for the frozen food department.
- While household penetration over an entire year is 99%, 86% have bought frozen food items, such as frozen pizza, vegetables or entrees, since early March. This includes an equal share of self-rated frequent buyers of frozen consumers and those who were not. Importantly, 7% of consumers who have purchased frozen foods since the onset of COVID-19 in the U.S. in early March said they did not (or very infrequently) purchase frozen food items pre-pandemic.
- In addition to new feet down the aisle, current frozen food consumers changed up their buying patterns: 70% bought more frozen food than usual, 68% agreed that their purchases included different items than usual and 72% picked up different brands than usual because of unavailability. In total, 73% of shoppers said they experienced out-of-stocks when shopping for frozen foods amid the pandemic.

- In addition to different choices in the frozen foods aisle, more consumers bought groceries (46%) and frozen foods (39%) online.
- The top six reasons for purchasing more frozen food are the long shelf-life of frozen foods (60%), consumer desire to stock up in case of food shortages (58%), enabling consumers to limit the number of trips to the grocery store (51%), the ease of preparation (46%), saving time on preparation and cleanup (36%) and consumers' belief that frozen foods are safer than fresh items right now (33%).
- The most frequently purchased categories were frozen vegetables, meat/poultry and pizza. First-time trial was highest for frozen meat/poultry, sides, fruit and entrees. Both single-serve and multi-serve entrees enjoyed double-digit percentages of first-time buyers. About one-third of consumers stocked up more than usual on frozen vegetables, meat/poultry and pizza compared to pre-pandemic.
- Consumers rate their satisfaction with the frozen foods they purchased highly. Convenience received the top rating, with an average of 4.3 on the five-point scale, where five is excellent. Quality was second-highest, with an average of 4.1.
- 50% of consumers who have purchased frozen foods since the onset of COVID-19 in the U.S. expect that they will purchase a lot more (18%) or somewhat more (32%) frozen foods in the next few months.

Introduction

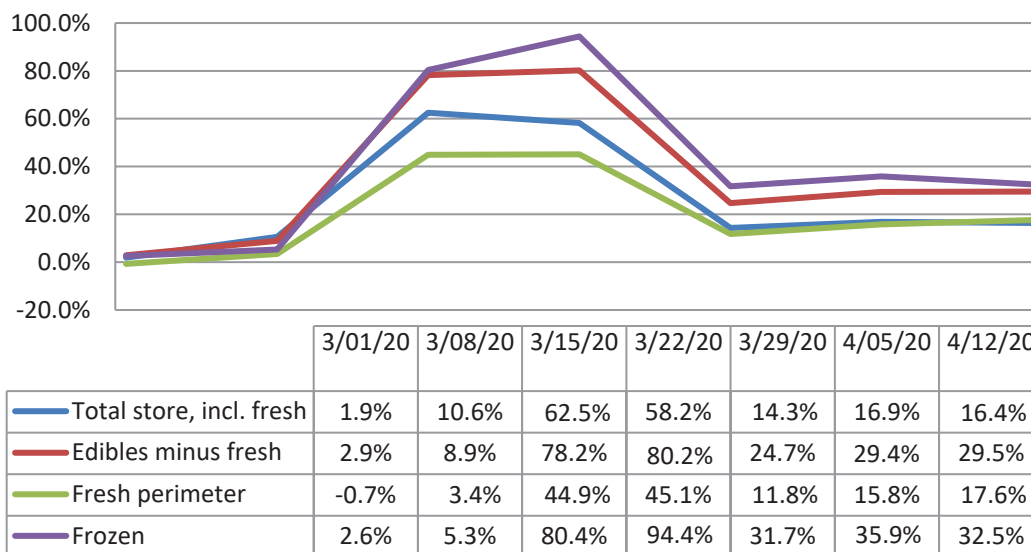
In the past few years, frozen food sales have seen significant growth — on par with center store edibles and far outperforming the fresh perimeter. Above-average interest among Older Millennials combined with high levels of innovation have driven both dollar and volume sales growth for frozen foods.



Source: IRI, Total U.S., MULO, % \$ growth versus year ago

The arrival of coronavirus in the United States upended grocery shopping as we know it, and the sales of frozen food items along with it. While big gains were measured for virtually all food categories starting the second week of March, frozen foods have emerged as a sales powerhouse amid COVID-19 buying. Sales patterns during the first week of March 2020 were much in line with the 2019 results. While non-food sales, such as paper goods and household supplies, started gearing up the week ending March 8, food sales took over starting the week of March 15. Frozen foods quickly emerged as a growth leader, nearly doubling sales the week ending March 22 compared with the comparable week in 2019. The weeks ending March 15 and 22 were the two big panic buying weeks, but frozen food sales remained highly elevated going into the second week of April.

Dollar growth versus comparable week in 2019



Source: IRI, Total U.S., MULO, % \$ growth versus year ago

A Deep-Dive into Frozen Food Sales

A look at the sales during the four weeks ending April 5th (over the height of the pandemic buying) and the building calendar year shows just how much frozen food sales have changed. For the building calendar year, all areas are up double-digits, ranging from 11.8% for dinners/entrees to 26.9% for processed chicken (nuggets). When looking at the four weeks ending April 5, 2020 compared with the comparable four weeks in 2019, growth rates are even higher, with triple-digit growth for frozen meat. Both frozen pizza and potato items are enjoying tremendous popularity as well, as convenient solutions for consumers preparing meals at home.

	Dollar sales growth versus comparable time period in 2019	
	Latest 4 Weeks Ending 4-5-20	Building Calendar Year 2020
Frozen Department (ex poultry)	+60.5%	+18.6%
Frozen baked goods	+56.2%	+16.0%
Frozen beverages	+94.6%	+25.1%
Juices	+94.8%	+25.2%
Frozen desserts	+33.6%	+13.9%
Ice cream/sherbet	+35.9%	+13.0%
Novelties	+31.2%	+15.6%
Desserts/toppings	+27.8%	+12.3%
Frozen fruits & vegetables	+76.3%	+23.0%
Fruit	+69.3%	+24.1%
Potatoes/onions	+81.3%	+24.7%
Plain vegetables	+78.7%	+23.2%
Frozen meals	+60.3%	+15.6%
Breakfast food	+50.2%	+15.7%
Dinners/entrees	+47.6%	+11.8%
Pizza	+94.2%	+24.5%
Frozen meat/poultry/seafood	+76.9%	+24.1%
Processed poultry	+84.5%	+26.9%
Meat	+101.0%	+36.5%
Seafood	+58.5%	+19.1%
Frozen snacks	+82.2%	+22.3%
Appetizers or snack rolls	+82.3%	+22.5%

Source: IRI, Total US, MULO, 4-week and building calendar year view % change vs. year ago.

While during the middle of March dollar growth was driven by panic purchasing, it is clear during these last few weeks that there is a higher everyday demand that is prompting a new baseline that sits well above the old normal. In addition to the obvious impact of more breakfast, lunch and snack occasions having moved to at-home occasions, there are many other drivers of elevated everyday demand. Consider restaurants being

limited to takeout only, evening activities that are cancelled freeing up people's evenings, many fewer people who are commuting to and from work, and more people around the table due to students being home from college and younger children home from school, daycare or aftercare. At the same time, economic pressure is building for some consumers, which also tends to favor home cooking versus eating out or delivery.

Importantly, in addition to changes in consumption, shopping patterns have drastically changed as well. Sales results must be seen against the backdrop of many stores having shortened opening hours, closed service departments, metered entry of shoppers, purchase limitations on popular items and continued out-of-stocks for others. Online sales continue to skyrocket, attracting new shoppers, slot availability permitting, and seeing increased order frequencies and basket sizes. Patterns related to day of the month, week, day, hour, online and offline are vastly different post coronavirus.

Changes in Consumption Behavior

As of early April, when the consumer survey fielded, the vast majority of states have issued business and social guidelines and shelter-in-place orders. Confined to the home, family dinners got back on schedule and consumers got back to cooking — whether scratch preparation, or the convenience of frozen entrees or frozen ingredients.

Nine in 10 Americans Are Preparing More Meals at Home Vs. Pre COVID-19

Over the past few years, the number of home-prepared meals had been dwindling in favor of restaurant and grocery deli-prepared offerings. According to the Power of Meat 2020 study by the North American Meat Institute and FMI, American households averaged 4.5 home-prepared meals during a typical week as of December 2019. Surveyed during the second week of April, nine in 10 Americans reported they have been eating more meals prepared at home since the onset of coronavirus in the U.S. in early March. As such, the return to home-prepared meals is arguably the largest, but also a sustaining, driving force behind the surge in grocery sales since the second week of March. The biggest increase in the number of home-prepared meals are Older Millennials and Gen X, precisely those consumers who tend to be in the pressure-cooker stage of their lives, oftentimes juggling careers and families. The new realities also disproportionately affect higher-income consumers, who often had a greater propensity for eating out prior to the pandemic.

Q: Since the onset of the coronavirus (COVID-19) in the U.S. in early March, are you eating more meals that are prepared at home?	Total population		Consumers who	
		% Yes	bought frozen	% Yes
All		90%		93%
Men		90%		91%
Women		90%		94%
Gen Z		89%		91%
Younger Millennials		89%		93%
Older Millennials		93%		96%
Gen X		91%		94%
Boomers		84%		90%
Urban		92%		94%
Suburban		88%		92%
Small town		83%		89%
Rural		92%		95%
Lower income (<\$45,000/HH/year)		88%		90%
Middle income (\$45,000-\$75,000/HH/year)		92%		95%
Higher income (\$75,000-\$125,000/HH/year)		88%		93%
High income (>\$125,000/HH/year)		92%		95%
1 person HH		85%		88%
2 people		88%		92%
3-4 people		93%		94%
5+ people		92%		94%



With more consumers preparing home-cooked meals, frozen entrees and meal ingredients have a big opportunity to be timesaving, convenient solutions for those consumers who do not have the skill, desire or time to prepare meals from scratch. At the same time, it is important to note that all consumption occasions are seeing a greater share of at-home versus away-from-home, including breakfast, snacks and lunch. Investing in being on the consumer radar as an immediate and back-up solution for all these consumption occasions among no less than 90% of consumers and 93% of frozen-food consumers who are preparing food at home more often is important to optimize sales now and in the future.

Nearly Three-Quarters of Americans Spend More Time on Meal Preparation

In addition to a greater number of home-prepared meals, 73% of consumers are spending more time on meal preparation versus their pre-pandemic habits. Virtually all demographics are spending more time in the kitchen, but some notable differences are urban and high-income consumers, who always had a higher propensity for eating out. Singles are the least likely to spend more time on meal preparation, but 79% of families with three or four people are spending more time on it.

Q: Since the onset of the coronavirus (COVID-19) in the U.S. in early March, are you taking more time to prepare meals than usual?	Spend more time on meal preparation
All	73%
Men	72%
Women	75%
Gen Z	70%
Younger Millennials	73%
Older Millennials	84%
Gen X	75%
Boomers	61%
Urban	78%
Suburban	71%
Small town	61%
Rural	77%
Lower income (<\$45,000/HH/year)	68%
Middle income (\$45,000-\$75,000/HH/year)	76%
Higher income (\$75,000-\$125,000/HH/year)	74%
High income (>\$125,000/HH/year)	82%
1 person HH	62%
2 people	71%
3-4 people	79%
5+ people	75%
Small (shoebox size) freezer in the fridge	80%
Large drawer or compartment in the fridge	74%
Standalone freezer	73%



The additional time spent on meal preparation provides big opportunities for frozen food in terms of meal ingredients, including frozen vegetables, fruit, baking and meat items. Providing recipe and meal ideas using frozen food ingredients or campaigns directed at “quarantine cuisine” may be great ways to help consumers shake up the routine.

Frozen Food Buying Amid COVID-19

The vast majority of consumers bought at least some frozen foods prior to coronavirus-induced shopping. The larger their freezer capacity, the greater the tendency to purchase frozen foods. Those patterns remained true during the weeks of panic buying and beyond, as frozen foods emerged as a sales powerhouse for immediate consumption and back-up supply.

Seven in Eight People Buy Frozen Foods Pre and Post Pandemic

Frozen foods had high household penetration across all demographics already and that has grown during these unprecedented times. Overall, 86% of consumers have bought frozen food items since the onset of coronavirus in the U.S., with only slightly lower engagement among singles and people with limited freezer space. People who have not purchased any frozen food items since early March were discontinued from the survey. Freezer capacity insights can be found in the Appendix.

93% *of those who purchased frozen post pandemic purchased food pre COVID-19 as well*

Importantly, among those who bought frozen foods since early March, 93% did so prior to COVID-19 as well — meaning 7% are new shoppers for the department. In a category with high overall household penetration, gaining new shoppers down the aisle is an important win. It is important to keep in mind that while IRI-measured household penetration for frozen foods is 99%, only one purchase per year qualifies households as being engaged. Shoppers are unlikely to see themselves as frozen food shoppers if

Q: Since the onset of the coronavirus (COVID-19) in the U.S. in early March, have you bought any frozen food items, such as frozen pizza, vegetables or entrees?	Have bought during the pandemic
All	86%
Men	88%
Women	86%
Gen Z	88%
Younger Millennials	90%
Older Millennials	89%
Gen X	85%
Boomers	81%
Urban	84%
Suburban	88%
Small town	83%
Rural	89%
Lower income (<\$45,000/HH/year)	85%
Middle income (\$45,000-\$75,000/HH/year)	89%
Higher income (\$75,000-\$125,000/HH/year)	87%
High income (>\$125,000/HH/year)	85%
1 person HH	78%
2 people	88%
3-4 people	89%
5+ people	89%
Small (shoebox size) freezer in the fridge	85%
Large drawer or compartment in the fridge	86%
Standalone freezer	93%

purchases are very infrequent.

The 7% of shoppers who prior to COVID-19 did not buy frozen foods includes an above-average proportion of:

- Boomers on the one hand and Gen Z on the other
- Consumers living in the Northeast
- Single-person households
- People living in urban areas
- Higher-income households

- People who only have one freezer compartment in the fridge, particularly small, shoebox sized freezers.

Online Grocery Shopping Sees Big Boost Amid COVID-19

While 41% of consumers have bought at least some groceries online, most do so very infrequently or tried it once or twice only, according to the Power of Frozen 2019. Pre-COVID-19, less than 5% of consumers purchased groceries online on a weekly basis and 20% did so at least once a month, according to IRI. Since the onset of coronavirus in the U.S., the number of online shoppers, the shopping frequency and the amount of dollars spent online have all increased significantly. Measured in the second week of April, 46% of survey respondents had ordered groceries online since early March — roughly equal to a one month timeframe. As a share of the total population, 39% had ordered frozen foods online since early March. This means that of people who ordered groceries online over the past five weeks, 85% included frozen foods as part of their order. This compared with 73% pre-pandemic, according to the Power of Frozen 2019.

85% of people who have ordered groceries online since the onset of coronavirus included frozen food items

Q: Have you ordered any groceries online since the onset of COVID-19 in early March? Q: Have you ordered any frozen foods online since the onset of COVID-19 in early March?	Have bought groceries online during the pandemic	Have bought frozen foods online during the pandemic	Share who bought online groceries incl. frozen foods
All	46%	39%	85%
Men	53%	47%	89%
Women	48%	34%	71%
Gen Z	41%	36%	88%
Younger Millennials	53%	52%	98%
Older Millennials	51%	47%	92%
Gen X	54%	45%	83%
Boomers	31%	19%	61%
Northeast	49%	41%	84%
Midwest	39%	32%	82%
South	46%	38%	83%
West	50%	46%	92%
Urban	55%	51%	93%
Suburban	48%	39%	81%
Small town	29%	26%	90%
Rural	31%	25%	81%

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Q: Have you ordered any groceries online since the onset of COVID-19 in early March? Q: Have you ordered any frozen foods online since the onset of COVID-19 in early March?	Have bought groceries online during the pandemic	Have bought frozen foods online during the pandemic	Share who bought online groceries incl. frozen foods
Lower income (<\$45,000/HH/year)	36%	30%	83%
Middle income (\$45,000-\$75,000/HH/year)	42%	36%	86%
Higher income (\$75,000-\$125,000/HH/year)	58%	52%	90%
High income (>\$125,000/HH/year)	60%	50%	83%
1 person HH	38%	32%	84%
2 people	47%	37%	79%
3-4 people	52%	44%	85%
5+ people	37%	40%	85%

Grocery e-commerce, including shopping for frozen foods online, continues to skew toward urban areas, Millennials and Gen X, higher income and larger households. However, compared with pre-COVID-19, engagement intensified among current core users and engagement rose among population groups that typically trail in grocery e-commerce. Delivering positive experiences during the ordering process and delivery of items is key to continued engagement. One shopper reported, “This was my first online delivery shopping. The app on my iPhone was very easy to use. The delivery driver was friendly, fast, and did a great job of maintaining social distancing. Everything was in paper bags, which hold the virus for less time than plastic. All the frozen was together in two bags and still frozen. All the cold was together and still cold. It was an amazingly wonderful experience!!!”



Many repeat online shoppers start with their frequently purchased items. Important questions in building online brand and product strategies are how to ensure winning from the first click, as well as how to gain visibility if the brand or product was not included in the initial purchase. Studies also show promotional activity is of equal importance online as it is offline and the ability to easily search by brands and item types is essential.

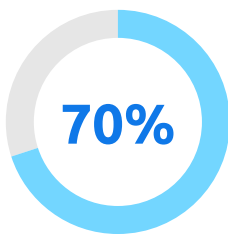
A Changed Approach to Frozen Foods

The survey continued with building an understanding of frozen food purchases pre- and post-pandemic, relative to the amount of frozen food purchased, brands and item types. Coronavirus had a profound impact on it all.

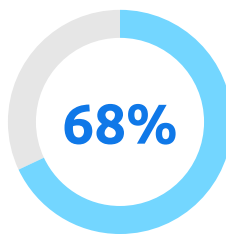
COVID-19 Drives More and Different Frozen Food Purchases

Seven in 10 frozen food shoppers increased the amount of frozen food they have bought since the start of pandemic in the U.S. Importantly, this share is unchanged at 70% among both frequent and infrequent frozen food shoppers, signaling elevated engagement among all frozen food shoppers. Three-quarters of frozen food shoppers experienced out-of-stocks on frozen items they meant to purchase since the onset of coronavirus in the U.S. This has prompted many consumers to divert from the usual. More than two-thirds of consumers have since purchased different frozen food items or types and 72% have picked up different brands than they usually purchase because of unavailability. One shopper said, “Experimentation with different types of food right now is helping me prevent depression and getting bored with the same old, same old.”

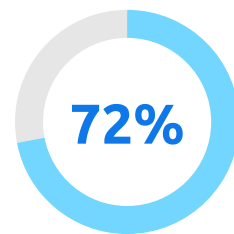
Q: Thinking about your frozen food shopping since the onset of coronavirus in the U.S. versus before...?



Bought more frozen foods
Post pandemic than pre COVID-19



Bought different frozen items
Post pandemic than pre COVID-19



Bought different frozen brands
Post pandemic than pre due to unavailability

Across demographics, consumers have been buying more frozen foods than during regular times as well as different items and brands. Millennials, who already were above-average buyers of frozen food, are the most likely to have been purchasing more since early March. Frozen foods are also clearly a solution for families, with 81% of households with children under the age of 18 living at home having bought more frozen food since early March versus 61% of households without children living at home. More than three-quarters of households with kids also bought different types of items than they did pre-pandemic, perhaps in response to children being home from school, college and daycares.

AFFI's Power of Frozen 2019 study found that consumers' freezer capacity is closely related to frozen food purchases, with above average engagement among consumers who have a stand-alone freezer or multiple freezer options. However, amid COVID-19 purchasing, 78% of consumers who only have very limited freezer space, described as a shoebox-sized compartment in the fridge, increased the amount of frozen food they purchased.

Some of the most notable differences are found in consumers' decisions to divert from typical brand choices because items were unavailable. Women have been more likely to do so these past five weeks than men, as have frequent frozen food buyers. Seeing more Boomer engagement across items and brands is important for frozen foods as well.

Q: Since the onset of the coronavirus (COVID-19) in the U.S. in early March versus pre pandemic, have you..? % yes	Bought more frozen foods	Bought different items	Bought different brands
All	70%	68%	72%
Men	72%	67%	69%
Women	69%	68%	75%
Gen Z	71%	68%	74%
Younger Millennials	74%	73%	79%
Older Millennials	78%	77%	80%
Gen X	73%	68%	70%
Boomers	57%	55%	61%
Northeast	70%	71%	74%
Midwest	67%	63%	67%
South	72%	67%	72%
West	71%	71%	76%
Urban	75%	77%	77%
Suburban	72%	68%	73%
Small town	54%	53%	57%
Rural	65%	55%	69%
Lower income (<\$45,000/HH/year)	65%	65%	68%
Middle income (\$45,000-\$75,000/HH/year)	71%	65%	75%
Higher income (\$75,000-\$125,000/HH/year)	74%	71%	72%
High income (>\$125,000/HH/year)	78%	75%	77%
1 person HH	65%	62%	64%
2 people	62%	62%	68%
3-4 people	77%	74%	76%
5+ people	75%	68%	80%
Households with kids living at home	81%	76%	73%
No kids living at home	61%	61%	70%
Small (shoebox size) freezer in the fridge	78%	72%	77%
Large drawer or compartment in the fridge	70%	68%	73%
Standalone freezer	69%	66%	70%
Self-rated frequent frozen food buyer pre-pandemic	70%	68%	74%
Not a self-rated frequent frozen food buyer pre-pandemic	70%	68%	68%



COVID-19 panic buying drastically changed shopping decisions, from store choices to frozen food brands. With seven in 10 current buyers having modified their frozen food behavior in the types of items and brands purchased, it is likely that every brand has gained new shoppers along with having lost loyal customers as a result of stockouts. Finding ways drive continued loyalty among new and old shoppers is a big opportunity for driving sustained sales growth.

Shelf Life, Fear of Food Shortages and Minimizing Store Trips Are the Top Reasons for Buying More/Different Frozen Food

Twelve percent of consumers said they had been ramping up their frozen food purchases lately regardless of the pandemic. But many more of those consumers who either bought more frozen food (70%) since early March and/or a greater variety of items (68%) point to frozen foods' shelf life (60%) as the driving force. Another 58% said they wanted to stock up in case of food shortages and 51% point to having frozen foods on hand helps to minimize trips to the grocery store.

Q: What prompted you to buy more or different frozen food items versus pre-COVID-19?	Bought more frozen foods	Frequent frozen food buyer	Not a frequent frozen food buyer
Frozen food lasts longer	60%	58%	65%
Wanted to stock up in case of food shortages	58%	57%	64%
Having frozen foods helps minimize trips to the grocery store	51%	53%	48%
Ease of preparation (convenient)	46%	48%	37%
Saves time (on preparation and cleanup)	36%	37%	30%
Think frozen foods are safer than fresh right now	33%	36%	26%
Cooking more evening dinners at home versus eating out	30%	31%	26%
Saves money	28%	28%	27%
Availability in-store versus other options, like fresh or canned	18%	17%	20%
Eating breakfast at home more often	17%	17%	16%
Avoiding fresh produce right now	15%	16%	14%
Quality of ingredients/food	13%	14%	8%
Been using more frozen foods lately, regardless of coronavirus	12%	18%	4%
Making smoothies at home more often	11%	11%	11%
Avoiding fresh meat right now	7%	7%	7%

Interesting differences are found among consumers who considered themselves frequent frozen food buyers pre pandemic and those who did not. The latter were more likely to point to shelf life, fear of food shortages and lack of availability in comparable items in fresh or shelf stable as reasons to purchase more frozen food. One shopper said, "I bought frozen vegetables because the canned vegetables were wiped out."

Frequent buyers were much more likely to cite frozen foods' ease of preparation, time savings, safety and their quality of ingredients as reasons to purchase more frozen foods since the onset of coronavirus.

A look at purchase drivers by generation shows different motivators for purchasing more also. Whereas younger shoppers were more worried about food shortages, Boomers are seeing frozen foods as a solution to minimize store trips. One shopper said, "I'm 74 and am trying to avoid human contact at stores. I now buy groceries online and more frozen so I can minimize trips to the supermarket."

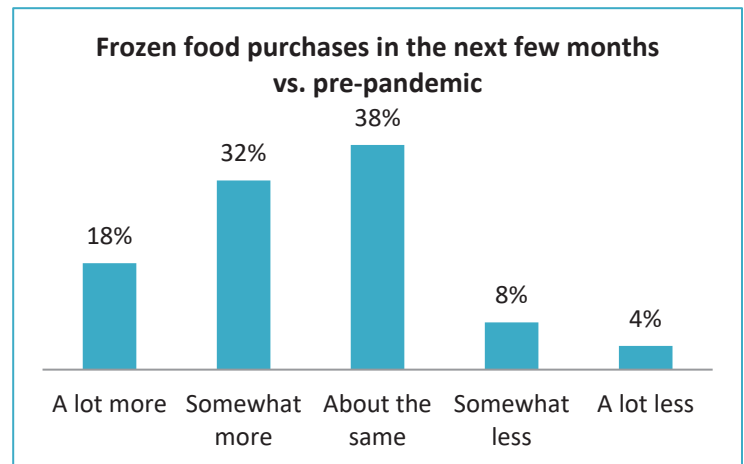
Q: What prompted you to buy more or different frozen food items versus pre-COVID-19?	Bought more frozen foods	Gen Z	Millennials	Gen X	Boomers
Frozen food lasts longer	60%	64%	58%	53%	66%
Wanted to stock up in case of food shortages	58%	60%	64%	57%	48%
Having frozen foods helps minimize store trips	51%	45%	50%	47%	62%
Ease of preparation (convenient)	46%	42%	46%	46%	43%
Saves time (on preparation and cleanup)	36%	41%	32%	38%	38%
Think frozen foods are safer than fresh right now	33%	30%	35%	36%	30%
Cooking more evening dinners at home	30%	27%	27%	27%	42%
Saves money	28%	39%	29%	22%	26%
Availability in-store versus other options	18%	17%	20%	17%	16%
Eating breakfast at home more often	17%	14%	15%	23%	16%
Avoiding fresh produce right now	15%	21%	18%	12%	10%
Quality of ingredients/food	13%	16%	11%	16%	13%
Been using more frozen foods lately	12%	14%	10%	13%	15%
Making smoothies at home more often	11%	12%	12%	14%	6%
Avoiding fresh meat right now	7%	9%	10%	7%	2%



Like the Power of Frozen 2019, this study also found the higher appreciation for the food itself and the convenience factor among loyal frozen customers. This presents an important opportunity among newer shoppers. Positive experiences related to convenience, taste and quality can be important drivers of continued usage once coronavirus-related measures have been lifted. Likewise, different motivations among different generations may help marketing messaging.

Half of Shoppers Predict They Will Continue to Purchase More Frozen Foods

While it is hard to predict future behavior once the world will return to some level of normalcy, 50% of consumers expect they will purchase a lot more (18%) or somewhat more (32%) frozen foods in the next few months compared with their pre-pandemic level of purchasing. In contrast, only 12% expect they will purchase fewer frozen foods during these next few months. This could be related to shifting consumption occasions or no longer having a need to stock up or avoid stores. For instance, the Power of Frozen 2019 found that 54% of frozen food consumers occasionally or frequently bring frozen foods to work for breakfast, lunch or dinner. As more consumers are working from home, this may affect these types of purchases.



Q: Thinking about how you might be shopping for frozen foods in the next few months compared with pre pandemic, do you think you will be buying...?

Expect to purchase more frozen foods

All	50%
Men	53%
Women	48%
Gen Z	50%
Younger Millennials	52%
Older Millennials	48%
Gen X	56%
Boomers	46%
Urban	55%
Suburban	50%
Small town	42%
Rural	47%
Lower income (<\$45,000/HH/year)	43%
Middle income (\$45,000-\$75,000/HH/year)	48%
Higher income (\$75,000-\$125,000/HH/year)	57%
High income (>\$125,000/HH/year)	63%

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Q: Thinking about how you might be shopping for frozen foods in the next few months compared with pre pandemic, do you think you will be buying...?	Expect to purchase more frozen foods
1 person HH	45%
2 people	47%
3-4 people	52%
5+ people	57%
Households with kids living at home	57%
No kids living at home	44%
Self-rated frequent frozen food buyer pre-pandemic	51%
Not a self-rated frequent frozen food buyer pre-pandemic	48%

Importantly, future buying predictions are equally strong among shoppers who consider themselves frequent frozen food buyers pre-pandemic and those who do not, with only a three percentage point difference. Frozen foods are likely to see elevated levels across demographics, particularly in urban areas and high-income zip codes. Families, particularly households of five or more people, cite an above-average likelihood of buying more in the upcoming months (57%).

Convenience Scores the Highest on the Frozen Food Report Card

With an average of 4.3 on a five-point scale ranging from poor to excellent, convenience is the top rated attribute. Quality received the second-highest rating, at 4.1. Ratings for nutrition are the lowest, however, at an average of 3.6, they are still well above the mid-point. Ratings are slightly higher among those who already were frequent buyers as well as those who expect to purchase more in the upcoming months.

Q: Please rate the frozen foods you purchased on:	Bottom 2 box (1+2)	Top 2 box (4+5)	Average rating
Convenience	3%	81%	4.3
Quality	6%	75%	4.1
Taste	5%	71%	3.9
Price	4%	63%	3.8
Nutrition	11%	54%	3.6

A Frozen Food Item Deep Dive

The increase in frozen food buyers along with consumers buying more and a greater variety has benefitted all frozen food categories. Many achieved triple digit growth during the key stock up weeks and most have remained highly elevated during the first weeks of April.

Sales Data Shows Gains Across Categories

In addition to asking consumers about the frozen food items they have purchased since the onset of coronavirus in the U. S., IRI sales data shows high levels of year-over-year growth for all week endings starting March 15. Many started to see sales gear up the week of March 8. Importantly, elevated sales are measured both for full meal solutions, including frozen breakfast foods, entrees and pizza, and meal ingredients, such as frozen fruits and vegetables, potato dishes, meats, beverages and baked goods.

	% Dollar sales change vs. comparable week ending in 2019							Share of \$ sales
	4-12-20	4-5-20	3-29-20	3-22-20	3-15-20	3-8-20	3-1-20	4-12-20
Frozen Dept (ex Poultry)	+32.5%	+35.9%	+31.7%	+94.4%	+80.4%	+5.3%	+2.6%	100%
Frozen meals	+21.5%	+27.8%	+25.4%	+99.3%	+88.6%	+3.3%	-2.5%	34%
Breakfast food	+22.2%	+25.4%	+21.3%	+81.9%	+72.6%	+4.5%	+1.1%	
Dinners/entrees	+8.9%	+14.3%	+21.3%	+83.2%	+79.4%	+3.5%	-3.4%	
Pizza	+47.0%	+58.8%	+53.8%	+143.0%	+120.1%	+3.8%	-2.0%	
Frozen meat/poultry/seafood	+39.2%	+43.0%	+44.7%	+123.1%	+97.5%	+3.5%	+8.3%	31%
Processed poultry	+33.7%	+42.6%	+43.7%	+134.7%	+115.8%	+9.2%	+4.3%	
Meat	+51.8%	+58.5%	+56.9%	+163.6%	+131.6%	+17.9%	+11.0%	
Seafood	+40.4%	+35.5%	+33.8%	+96.8%	+67.4%	-5.7%	+16.9%	

Chart continued on next page

	% Dollar sales change vs. comparable week ending in 2019							Share of \$ sales
	4-12-20	4-5-20	3-29-20	3-22-20	3-15-20	3-8-20	3-1-20	4-12-20
Frozen Dept (ex Poultry)	+32.5%	+35.9%	+31.7%	+94.4%	+80.4%	+5.3%	+2.6%	100%
Frozen desserts	+28.6%	+32.0%	+23.9%	+43.1%	+35.9%	+9.3%	+2.2%	22%
Ice cream/sherbet	+31.1%	+35.0%	+26.9%	+45.4%	+36.5%	+8.2%	-0.2%	
Novelties	+21.5%	+27.9%	+20.5%	+40.6%	+36.7%	+11.4%	+6.1%	
Desserts/toppings	+57.2%	+31.3%	+17.1%	+36.9%	+25.5%	+5.4%	+0.2%	
Frozen fruits/vegetables	+44.6%	+47.4%	+40.7%	+111.4%	+106.7%	+11.8%	+4.3%	13%
Fruit	+43.7%	+42.9%	+37.0%	+95.4%	+103.5%	+19.1%	+10.1%	
Potatoes/onions	+54.4%	+60.7%	+50.1%	+117.3%	+98.3%	+9.0%	+3.2%	
Plain vegetables	+39.5%	+42.2%	+37.5%	+115.9%	+119.3%	+13.3%	+4.6%	
Prepared vegetables	+12.8%	+18.4%	+8.8%	+84.5%	+62.9%	-12.6%	-13.4%	
Frozen baked goods	+63.2%	+42.4%	+38.9%	+87.8%	+56.8%	+1.4%	-0.8%	4%
Frozen snacks	+49.7%	+56.8%	+46.0%	+127.2%	+97.5%	+4.2%	+1.2%	4%
Appetizers/snack rolls	+49.9%	+56.9%	+46.1%	+127.4%	+97.5%	+4.2%	+1.3%	
Frozen beverages	+49.7%	+62.9%	+59.5%	+142.9%	+114.5%	+8.2%	-1.8%	<1%
Juices	+63.7%	+63.2%	+59.7%	+143.2%	+114.7%	+8.3%	-1.8%	

Source: IRI, Total US, MULO, 1 week view % change vs. year ago.

First Time Trial and Stocking Up Drive Sales Surges

Consumers listed the types of items they have purchased since the onset of coronavirus in the U.S. Many categories that already enjoyed high household penetration became even more popular, including frozen vegetables, meat/poultry and pizza that topped the list. In some cases, these purchases were first time trials, with high percentages for frozen meat/poultry, sides, fruit and entrees. Both single-serve and multi-serve entrees enjoyed double-digit percentages of first-time buyers. On the other hand of the spectrum, roughly one-third of consumers already bought frozen vegetables, meat/poultry and pizza pre-coronavirus, but they stocked up more than usual these past few weeks.

Q: Which frozen food items have you bought during the pandemic and how does this compare to your purchases pre-pandemic?	Bought during pandemic	First time buying it	Bought same amount as usual	Stocked up more than usual
Vegetables	90%	7%	49%	34%
Pizza	87%	7%	45%	35%
Meat and poultry items	87%	16%	37%	35%
Potato items	81%	8%	49%	24%
Ice cream	81%	6%	51%	24%
Appetizers/snacks	81%	8%	42%	31%
Sides (rice, pasta, mac & cheese, etc.)	80%	18%	31%	30%
Breakfast items	80%	7%	45%	28%
Fruits	78%	17%	36%	25%
Dessert items (excluding ice cream)	78%	6%	50%	21%
Multi-serve entrees (lasagna, pot pie, meat with sides, etc.)	74%	11%	38%	25%
Single-serve entrees (lasagna, pot pie, meat with sides, etc.)	73%	11%	36%	26%
Seafood	66%	8%	40%	18%
Meat alternatives/vegan items	20%	3%	10%	7%

Differences by self-rated frequent buyer of frozen food status were minimal. Families of three to five people were the most likely to have stocked up over the past five weeks across virtually all items, except meat alternatives. It is important to remember the impact of closed campuses, schools, daycares and after-school activities and sports on all meal occasions, from breakfast, lunch and dinner to snacks.

Q: Which frozen food items have you bought and how does this compare to your purchases pre-pandemic? % stocked up more than usual	All	1 person	2 people	3-4 people	5+ people
Pizza	35%	19%	29%	42%	36%
Meat and poultry items	35%	22%	27%	43%	43%
Vegetables	34%	24%	30%	38%	40%
Appetizers/snacks	31%	22%	25%	38%	36%
Sides	30%	21%	23%	37%	36%
Breakfast items	28%	24%	21%	35%	28%
Single-serve entrees	26%	23%	20%	31%	25%
Multi-serve entrees	25%	12%	24%	32%	28%
Fruits	25%	17%	19%	31%	28%
Potato items	24%	17%	21%	29%	25%
Ice cream	24%	17%	23%	27%	23%
Dessert items (excluding ice cream)	21%	14%	19%	24%	28%
Seafood	18%	17%	17%	21%	12%
Meat alternatives/vegan items	7%	10%	7%	3%	3%

Household income has a big impact on frozen food purchases throughout the year, with higher-income households spending disproportionately more in the frozen food aisle (see Appendix 1). Since the onset of coronavirus many of the higher-income shoppers stocked up more than usual on frozen foods. Four in 10 higher-income shoppers purchased more frozen vegetables, pizza and meat/poultry.

Q: Which frozen food items have you bought and how does this compare to your purchases pre-pandemic? % stocked up more than usual	All	Lower income	Middle income	Higher income
Pizza	35%	31%	36%	39%
Meat and poultry items	35%	30%	36%	39%
Vegetables	34%	27%	35%	40%
Appetizers/snacks	31%	29%	33%	32%
Sides	30%	25%	32%	35%
Breakfast items	28%	23%	31%	32%
Single-serve entrees	26%	21%	27%	30%
Multi-serve entrees	25%	23%	22%	30%
Fruits	25%	19%	22%	33%
Potato items	24%	23%	23%	27%
Ice cream	24%	18%	23%	30%
Dessert items (excluding ice cream)	21%	18%	22%	25%
Seafood	18%	13%	18%	23%
Meat alternatives/vegan items	7%	5%	6%	8%



COVID-19 causes big changes in grocery and frozen food routines. Many consumers have bought items they did not purchase before or stocked up on items. Frozen food brands can help provide recipes and meal ideas to encourage the use of these items and help establish new routines.

Methodology

The data for Frozen Food Purchases Amid COVID-19 were collected through an online consumer panel. The survey was conducted between April 10 and 14, among a national sample of 1,200 U.S. consumers. The margin of error associated with the survey is 3.0% at the 95% confidence level. Questions pertaining to frozen food purchases specifically were answered by 1,014 respondents. Percentages may not always add to 100% due to rounding.

Respondents have met the following requirements:

- Between 18 and 75 years of age
- Have purchased at least one frozen food item since the onset of coronavirus in the U.S. in early March. Questions pertaining to overall consumption habits were not subject to the frozen food purchase requirement.

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Geographic regions

- Northeast —New England (CT, ME, MA, NH, RI and VT) and the Middle Atlantic (NJ, NY and PA)
- Midwest —East North Central (IL, IN, MI, OH and WI) and West North Central (IA, KS, MN, MO, NE, ND and SD)
- South —South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA and WV); East South Central (AL, KY, MS and TN); and West South Central (AR, LA, OK and TX)
- West —Mountain (AZ, CO, ID, MT, NV, NM, UT and WY) and Pacific (AK, CA, HI, OR and WA)

Generational definitions

- Generation Z: 18-23
 - Young Millennials (Generation Y): Ages 24-29
 - Older Millennials: Ages 30-39
 - Generation X: Ages 40-55
 - Young Boomers: Ages 56-63
 - Older Boomers: Ages 64-75
- Millennials: 24-39
- Boomers: 56-75

Income definitions

- Lower income: <\$45,000 annually
- Middle income: \$45,000-\$75,000
- Higher income: >\$75,000, with a sub break for high income: >\$125,000

Appendix 1

Freezer capacity

Household income	Small (shoebox sized) freezer compartment in the fridge	Large freezer drawer or compartment in the fridge	Standalone freezer
Gen Z	23%	78%	18%
Younger Millennials	29%	73%	25%
Older Millennials	22%	75%	26%
Gen X	24%	71%	30%
Boomers	17%	69%	36%
Urban	24%	64%	24%
Suburban	21%	72%	28%
Small town	22%	76%	26%
Rural	21%	73%	41%
Lower income (<\$45,000/HH/year)	26%	67%	24%
Middle income (\$45,000-\$75,000/HH/year)	23%	74%	30%
Higher income (\$75,000-\$125,000/HH/year)	20%	76%	30%
High income (>\$125,000/HH/year)	16%	80%	34%
1 person HH	30%	64%	22%
2 people	20%	72%	29%
3-4 people	22%	76%	29%
5+ people	19%	73%	32%

Frozen — Purchase basics

Household income	% household penetration	Purchase frequency	Purchase size	Dollar share
<\$20K	92.0%	38.6x	\$9.67	11.6%
\$20-29.9K	96.1%	40.2x	\$9.36	9.5%
\$30-\$39.9K	97.1%	41.6x	\$9.98	9.0%
\$40-49.9K	97.6%	40.8x	\$10.35	8.6%
\$50-69.9K	97.9%	40.5x	\$10.68	14.6%
\$70-99.9K	97.7%	38.9x	\$11.05	16.4%
\$100K+	97.6%	36.6x	\$11.48	30.4%

Source: Nielsen Homescan, Total U.S., 52 weeks ended 12/28/2019, projection, UPC-coded purchases

Frozen department — % dollar shares 2019

Top selling super categories	<\$20K	\$20-29.9K	\$30-\$39.9K	\$40-49.9K	\$50-69.9K	\$70-99.9K	\$100K+
Prepared foods	12.3%	10.0%	9.5%	8.9%	14.7%	16.2%	28.3%
Pizza	12.9%	9.6%	8.8%	8.8%	15.1%	16.2%	28.6%
Fresh meat	12.1%	9.3%	8.9%	8.7%	14.8%	16.2%	30.0%
Cooked meat	12.1%	8.9%	8.6%	8.8%	14.9%	16.3%	30.2%
Desserts	11.9%	9.8%	9.2%	8.3%	14.2%	15.8%	30.7%
Vegetables	8.9%	8.3%	8.5%	8.1%	14.7%	16.0%	33.5%
Seafood	9.7%	8.2%	7.9%	7.9%	14.0%	16.9%	35.3%
Fruit	7.7%	7.7%	7.1%	8.0%	14.2%	17.5%	37.8%

Source: Nielsen Homescan, Total U.S., 52 weeks ended 12/28/2019, projection, UPC-coded purchases