



Usage and Volumetric Assessment of Beef in Foodservice

2018 edition



Funded by the Beef Checkoff.

January 2019

Project #18096v2



Background and Objectives

Every year since 2003, Technomic has conducted studies to investigate the usage of Beef and Chicken in the foodservice industry. In 2018, Technomic was again engaged to update the previous studies.

The primary objectives of this 2018 study edition were to:

- Determine the penetration of Beef usage in various foodservice segments.
- Provide an updated volumetric situation of the foodservice Beef market by major product categories, including estimated volume in pounds and dollars.
- Assess the foodservice market for a variety of Chicken products, including both penetration and volumetric statistics.
- Understand Beef and Chicken category usage trends, including volume trends, menu position and rationale for offering.



Methodology Summary

1

Program initiation meeting

2

Questionnaire development

3

Top 250 chain operator headquarters internet survey

4

Unit level data gathering from foodservice operators

5

Initial analysis

6

Market size validation/finalization including interviews with 16 distributors (both broadliners and meat specialists) and 5 processors of proteins serving the foodservice industry

Segments Included 2018 data

Segment	Definition	% Total food & non- alcoholic beverage (purchase dollars)	2018 real growth % (purchases)	# of industry units/locations
Limited service chains (LSR)	 LSR chains among the Technomic top restaurant chain listing Includes fast casual and quick service Minimum size = \$171MM in annual sales 	23%	2.1%	182,089
LSR small chains/independents	 LSR independents and chains <\$171MM in sales Includes fast casual and quick service 	8%	2.1%	171,629
Full service restaurant chains (FSR)	 FSRs among the Technomic top 200 restaurant chain listing Minimum size = \$172 MM in sales 	7%	-2.4%	23,181
FSR small chains/independents	 FSR independents and chains <\$172 in sales Includes midscale, casual dining and fine dining restaurants Includes social caterers 	20%	2.7%	328,912
Bars/taverns	Establishments with at least 50% of sales in alcoholic beverages	1%	0.2%	64,957
Lodging	Hotel foodservice, including hotel restaurants, room service, banquets and catering	4%	2.3%	55,412
Retailers	Foodservice within supermarkets, convenience stores and other retailers, such as department stores	12%	1.8%	203,002
Recreation	Stadiums, country and private clubs, theme parks, non-hotel casinos, movie theaters and cruise line foodservice	2%	-0.5%	32,244
Healthcare	Foodservice in acute care hospitals and long-term care nursing homes	4%	2.6%	57,098
Business & industry	Foodservice in plants and offices	3%	0.5%	10,070
Colleges	Foodservice in colleges and universities	3%	1.9%	4,583
Schools	Foodservice in K-12 schools, both public and private	4%	0.4%	124,381
Military	Foodservice on U.S. military bases	1%	0.5%	402
Corrections	Jails, prisons and penitentiaries at the local, county, state and federal levels	1%	-2.0%	5,961
Continuous care retirement centers (CCRCs)/Senior living	Senior homes/facilities where healthcare is not the primary purpose.	1%	6.7%	24,104
Total		94%*	1.6%	1,288,025

*Other 6% includes vending, office coffee service, micromarkets, transportation, child care, and religious establishments Source: Technomic

Category Scope

Pre-cut Beef steak		Whole/subprimals/ roasts	Pre-cooked roast Beef	All oth
 Chuck eye/delmonico 1116D, PS01 Denver steak/cut (underblade) 1116G Flank/skirt¹ 193 (flank), 121C, 121D (skirt) Flat iron 114D, PS01 or 1114D, PS01 Hanger steak¹ 140, 1140D Petite tender medallions/portioned (teres major) 1114F Porterhouse/t-bone 1173 (porterhouse); 1174 (t-bone) Ranch steak/cut 1114E, PS01 	 Ribeye/rib/ribeye cap 1103-1112C (ribeye/rib); 1112D (ribeye cap); Sirloin (includes top, butt, bottom, cap/coulotte) 1184-1185B Strip (top loin) 1179-1180B Tenderloin/filet 1188-1190C Tri-tip 1185C, 1185D All other steak (round, cubed, chuck, other steaks) 	-		 All Be brats/s Strips, shave includ blade steak 109B 176 (II 115D) Specia (pastr. roast I) Other (liver, all oth accou previo Excluding)
		 Tri-tip 185C, 185D 		

her Beef

- eef hot dogs/ /sausage
- s/cubes/shreds or ed/Philly Beef ding lifter meat, e meat, loin tail k or pectoral meal² 3 (Blade meat); (loin tail steak); O (Pectoral meat)
- cialty deli meats trami, corned Beef, Beef)
- r Beef , offal, organ, and her Beef not unted for iously. udes veal)⁷

Chicken

- Bone-in (wings, whole fryers, and parts)¹
- Boneless Chicken (all forms)1
- Further processed • Chicken

(patties, nuggets, tenders, strips, breaded, formed and dices)

All other¹

¹New category breakout in 2015 ²Category redefined in 2015

Notes/Clarifications

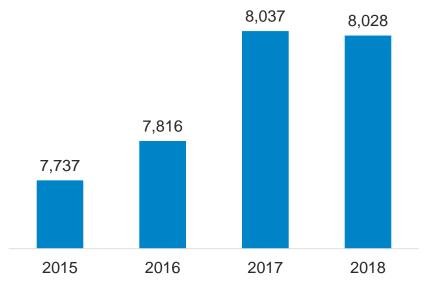
The following notes and clarifications will assist in interpreting the results of this report.

- All volumetric pound estimates are subject to a range of <u>+</u>10%.
- Volume data shown is for 12 months ending September of the respective year.
- Dollar volumes shown are based on reported pricing in September of each respective year. Pricing reflects price paid by the foodservice operator (operator purchase level). Price data are reported by distributors.
 - In 2015, the Beef market continued its inflationary trend until pricing started to fall in August/September. Since market value is based on pricing reported in September, the total dollar value of Beef market in 2015 may be understated.
- MM = millions.
- Min = minimal or less than 500,000 in annual pound volume.

- Numbers may not add due to rounding.
- In 2014, 2016 and 2018, bars/taverns, recreation, corrections, military and continuous care retirement centers were not specifically researched. 2013, 2015 and 2017 data are used as surrogates in these segments for these years respectively.



Beef Market Poundage and Value

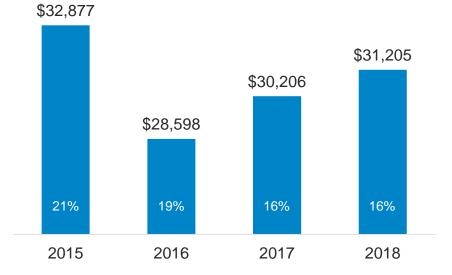


Observations

- Beef purchase was mostly flat in 2018, with only a very slight poundage decrease.
- Beef, however, increased by almost \$1B dollars in 2018.
- In 2018, Beef still represents 16% of total food purchases made by operators, which is the same share as seen in 2017.

Interpretation

• There has been some inflation overall in beef pricing over the past year.



Protein Summary

Observations

- Over the past 4 years, Chicken and Pork have grown at the expense of Beef and pose as Beef's biggest competitors.
- In 2018, Chicken has growth has been the largest of all proteins driven by significant price drops and supply expansion.

Insights

- The gap between Beef and Chicken volume has widened.
- Seafood has had a bit of a resurgence in 2018.

Segment	2018		2017		2016		2015		2014		\triangle M Lbs.	17.10
	M Lbs.	%	14-18	17-18								
Chicken	8,254	31%	8,082	31%	7,924	31%	7,757	30%	7,712	30%	+542	+172
Beef	8,028	30%	8,037	31%	7,816	30%	7,737	30%	7,920	31%	+108	-9
Pork	5,469	21%	5,421	21%	5,378	21%	5,315	21%	5,150	20%	+319	+48
Seafood	2,895	11%	2,843	11%	2,860	11%	2,855	11%	2,750	11%	+145	+52
Turkey	1,680	6%	1,657	6%	1,625	6%	1,600	6%	1,660	7%	+20	+23
Veal	72	<1%	71	<1%	73	<1%	75	<1%	80	<1%	-8	+1
All Others	66	<1%	66	<1%	68	<1%	70	<1%	67	<1%	-1	0
Total	26,464	100%	26,177	100%	25,744	100%	25,409	100%	25,339	100%	+1,125	+287

Dollar value calculations based on September pricing for each representative year

Key Observations and Interpretations

Beef product penetration

Observations

- Beef usage penetration is up overall to 99% of operators.
- There is significant increase in the percentage of operators purchasing Pre-Cooked Roast Beef.

Insights

• There is no major trend towards or away from any major Beef Cut.

% operators purchasing/using

Beef Cut	2018	2017	2016	2015	2014
Ground Beef	75%	77%	77%	75%	74%
Pre-cut Steaks	42	45%	41%	42%	48%
Roasts (subprimal)	46	45%	38%	36%	40%
Pre-cooked Roast Beef	28	22%	21%	20%	29%
Ribs	24	22%	14%	14%	15%
Overall Beef	99%	97%	94%	96%	96%

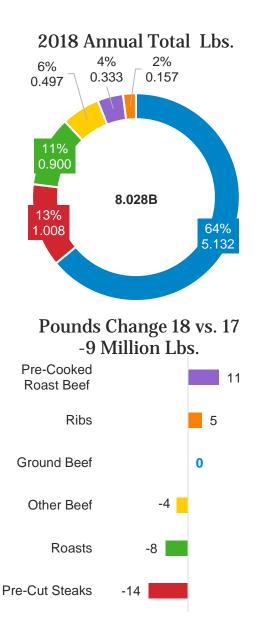
Beef Product Overview

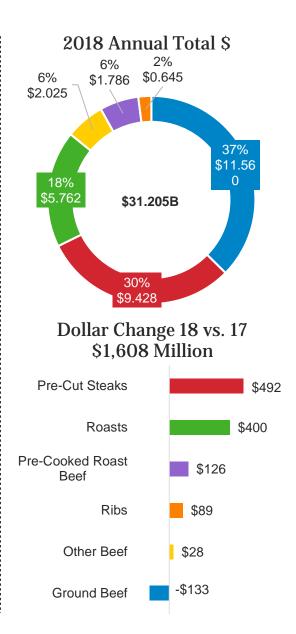
Observations

- Ground Beef represents the largest share of both pounds and dollars, but was flat in volume and declined in value since 2017.
- Despite showing slight decline, Roasts and Steaks increased substantially in value.

Insights

- Inflation has returned to the Beef category.
- Not much change overall has been experienced in any particular category in terms of poundage since 2017.





Beef Volume

By foodservice operator segment

Beef poundage is down 9 million pounds in 2018, but up 132 million pounds in FSRs alone. Beyond Restaurants have been a significant drag on volume.

However since 2014, the Beef market has increased by 105 million pounds.

Segment	2018		2017		2016		2015	2015		2014		2017-2018 Change		18 nange
	M Lbs.	%	M Lbs.	%										
LSR	3,638	45%	3,647	45%	3,487	45%	3,490	45%	3,598	45%	-9	-0.2%	40	1.1%
FSR	1,890	24%	1,758	22%	1,743	22%	1,712	22%	1,760	22%	132	7.5%	130	7.4%
Bars/Taverns ¹	114	1%	114	2%	106	1%	108	1%	129	2%	0	0.0%	-15	-11.5%
Total Restaurants & Bars	5,640	70%	5,519	68%	5,336	68%	5,310	69%	5,487	69%	121	2.2%	153	2.8%
Lodging	343	4%	402	5%	363	5%	335	4%	359	5%	-59	-14.6%	-16	-4.3%
Retail	236	3%	230	2%	256	3%	208	3%	154	2%	6	2.6%	82	53.2%
Recreation ¹	229	3%	229	2%	188	2%	188	2%	199	3%	0	0.0%	30	15.0%
Healthcare	188	2%	205	3%	249	3%	236	3%	226	3%	-17	-8.2%	-38	-16.6%
Colleges	311	4%	340	4%	335	4%	343	4%	327	4%	-29	-8.4%	-16	-4.8%
Schools	460	6%	463	6%	466	6%	467	6%	462	6%	-3	-0.6%	-2	-0.4%
Business & Industry	264	3%	293	4%	264	3%	287	4%	324	4%	-29	-9.9%	-60	-18.5%
Military ¹	159	2%	159	2%	152	2%	153	2%	186	2%	0	0.0%	-27	-14.6%
Corrections ¹	56	1%	56	1%	46	1%	46	1%	65	1%	0	0.0%	-9	-14.6%
CCRCs ¹	141	2%	141	2%	159	2%	159	2%	137	2%	0	0.0%	4	2.8%
Total Beyond Restaurants	2,388	30%	2,518	32%	2,479	32%	2,422	31%	2,438	31%	-130	-5.2%	-50	-2.1%
Total	8,028	100%	8,037	100%	7,814	100%	7,733	100%	7,926	100%	-9	-0.1%	102	1.3%

¹Segment not researched in 2014, 2016 and 2018. 2013, 2015 and 2018 data used as surrogates respectively for this segment Numbers may not add due to rounding.

Chicken Volume

By foodservice operator segment

Chicken poundage is up 172 million pounds in 2018, with the largest gain realized in LSRs (164 MM Lbs.). Since 2014, Chicken volume has increased by 542 million pounds or 7% total.

Segment	2018		2017 2016 20		2015		2014		2017-2018 Change		2014-2018 Total Change			
	M Lbs.	%	M Lbs.	%	M Lbs.	%	M Lbs.	%	M Lbs.	%	M Lbs.	%	M Lbs.	%
LSR	3,626	44%	3,462	43%	3,339	42%	3,256	42%	3,206	42%	164	4.7%	420	13.1%
FSR	1,933	23%	1,865	23%	1,869	24%	1,847	24%	1,852	24%	68	3.6%	81	4.4%
Bars/Taverns ¹	177	2%	177	2%	172	2%	172	2%	173	2%	0	0.0%	4	2.3%
Total Restaurants & Bars	5,736	69%	5,504	68%	5,381	68%	5,275	68%	5,231	68%	232	4.2%	505	9.7%
Lodging	266	3%	318	4%	314	4%	290	4%	294	4%	-52	-16.4%	-28	-9.5%
Retail	323	4%	360	4%	402	5%	372	5%	338	4%	-37	-10.3%	-106	-4.4%
Recreation ¹	103	1%	103	1%	89	1%	89	1%	91	1%	0	0.0%	12	13.1%
Healthcare	278	3%	253	3%	247	3%	248	3%	240	3%	25	9.9%	38	15.8%
Colleges	321	4%	325	4%	317	4%	313	4%	314	4%	-4	-1.2%	7	2.2%
Schools	678	8%	664	8%	651	8%	653	8%	651	8%	14	2.1%	27	4.1%
Business & Industry	263	3%	269	3%	269	3%	263	3%	293	4%	-6	-2.2%	-30	-10.2%
Military ¹	69	1%	69	1%	56	1%	56	1%	60	1%	0	0.0%	0	0.0%
Corrections ¹	92	1%	92	1%	86	1%	86	1%	84	1%	0	0.0%	0	0.0%
CCRCs ¹	125	2%	125	2%	112	1%	112	1%	116	2%	0	0.0%	0	0.0%
Total Beyond Restaurants	2,518	31%	2,578	32%	2,543	32%	2,481	32%	2,481	32%	-60	-2.3%	37	1.5%
Total	8,254	100%	8,082	100%	7,924	100%	7,757	100%	7,712	100%	172	2.1%	542	7.0%

¹Segment not researched in 2014, 2016 and 2018. 2013, 2015 and 2017 data used as surrogates respectively for this segment Numbers may not add due to rounding.

Beef v. Chicken v. Industry

Volume Change 2018 v. 2017

Segment	Beef	Chicken	Foodservice Industry*	Comments
LSR (Total)	-0.2%	4.7%	2.5%	Chicken tenders chains growth help Chicken sales overall.
FSR (Total)	7.5%	3.6%	0.8%	Independents driving growth in this segment overall, as the economy supports strong higher end steak restaurant growth.
Bars/Taverns	N/A	N/A	0.2%	
Total Restaurants & Bars	2.2%	4.2%	1.7%	
Lodging	-14.6%	-16.4%	2.3%	Shift toward more express formats negatively impacting protein volume.
Retailers	2.6%	-10.3%	1.8%	More focus on options beyond rotisserie chicken.
Recreation	N/A	N/A	-0.5%	
Healthcare	-12.0%	9.9%	2.6%	Segment is always cost conscious, therefore any increase in Beef prices hurts Beef in this segment.
Business and Industry	-0.3%	-2.2%	0.5%	Segment is flat overall
Colleges	-1.2%	-1.2%	1.9%	More focus on meatless options.
Schools	-8.1%	2.1%	0.4%	Segment is always cost conscious, therefore any increase in Beef prices hurts Beef in this segment
Military	N/A	N/A	0.5%	
Corrections	N/A	N/A	-2.0%	
CCRCs	N/A	N/A	6.7%	
Total Beyond Restaurants	-5.2%	-2.3%	2.5%	
Total	-0.1%	2.1%	1.6%	

Pre-Cut Steak Situation

Observations

- Traditional Cut Steaks lost the most volume since 2017, driven by Rib/Ribeye/Ribeye Cap. Despite this volume loss, they still gained almost \$500 million in total value.
- Emerging Steak cuts all gained volume except for Sirloin Steak

Insights

• Three cuts drove down steak volume in 2018: Rib/Ribeye/Ribeye Cap, Sirloin and Other Steak.

Pre-cut Steak Cuts	2018		2017		2018 Change vs. 2017			
	M Lbs.	\$ M	M Lbs.	\$ M	M Lbs.	\$ M		
Filets	166	\$2,698	169	\$2,620	-3	\$78		
Rib/Ribeye/Ribeye Cap	150	\$1,668	164	\$1,597	-14	\$71		
Flank/Skirt	117	\$860	114	\$650	3	\$210		
Strip/Top Loin	96	\$850	96	\$832	0	\$18		
Porterhouse/T-Bone	54	\$593	52	\$484	2	\$109		
Subtotal Traditional Cuts	583	\$6,669	595	\$6,183	-12	\$486		
Sirloin	198	\$1,376	217	\$1,432	-19	-\$56		
Flat Iron	77	\$539	70	\$533	7	\$6		
Petite Tender Medallions	42	\$292	33	\$238	9	\$54		
Hanger	34	\$124	27	\$95	7	\$30		
Tri-Tip	15	\$66	12	\$53	3	\$13		
Chuck Eye/Delmonico	15	\$115	14	\$109	1	\$6		
Ranch Cut	13	\$64	10	\$54	3	\$10		
Denver Steak/ Underblade	4	\$27	2	\$14	2	\$13		
Subtotal Emerging Cuts	398	\$2,603	385	\$2,526	13	\$77		
Other Steaks	27	\$156	42	\$231	-15	-\$75		
Total Steaks	1,008	\$9,428	1,022	\$8,940	-14	\$488		

Dollar value calculations based on September pricing of respective year Numbers may not add due to rounding

Roasts (Subprimal) Situation

Observations

Brisket has gained significant volume as has Petite Tender Roast, whereas Prime Rib and Sirloin Roast are down.

Insights

Despite being down by 8 million pounds, total Roast value has increased by almost 8% since 2017.

Roast (Subprimal)	2018		2017		2018 Change vs. 2017			
	M Lbs.	\$ M	M Lbs.	\$ M	M Lbs.	\$ M		
Tenderloin	214	\$2,213	219	\$2,137	-5	\$77		
Rib, Ribeye, Prime Rib or Ribeye Cap	189	\$1,654	200	\$1,500	-11	\$154		
Round	117	\$371	120	\$360	-3	\$11		
Chuck/Shoulder	110	\$359	108	\$313	2	\$46		
Subtotal Traditional Cuts	630	\$4,597	647	\$4,310	-17	\$287		
Petite Tender (teres major)	21	\$79	16	\$62	5	\$17		
Chuckeye/ Underblade	17	\$67	20	\$83	-3	-\$16		
Tri-Tip	17	\$60	17	\$60	0	\$0		
Subtotal Emerging Cuts	55	\$206	53	\$205	2	\$1		
Brisket	103	\$453	88	\$343	15	\$110		
Strip Loin/Top Loin	70	\$350	70	\$329	0	\$21		
Sirloin Roast	42	\$158	50	\$175	-8	-\$17		
Subtotal Other Roasts	215	\$961	208	\$847	7	\$114		
Total Roasts	900	\$5,762	908	\$5,362	-8	\$400		

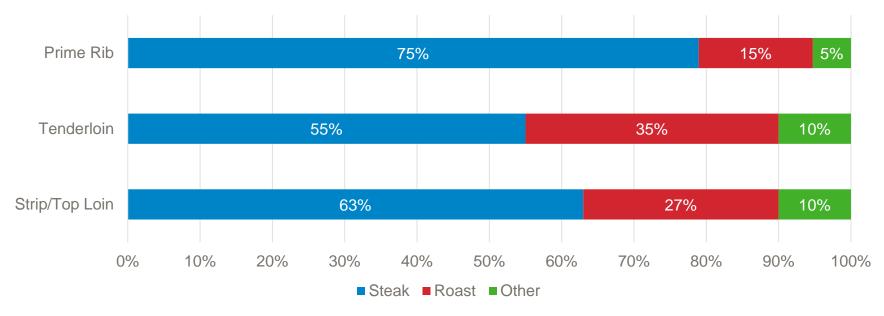
Dollar value calculations based on September pricing of respective year Numbers may not add due to rounding

Subprimal Roast End Product

Average Share

Users of Prime Rib, Tenderloin, and Strip/Top Loin Roast were asked to indicate what share of their poundage of each are ultimately served/sold as Steak, Roast or another application.

- On average, 75% of Prime Rib volume is served as Steak , while 15% is used as Roast.
- For Beef Tenderloin, 35% of poundage, on average, is served as Roast, while 55% is used as Steak.



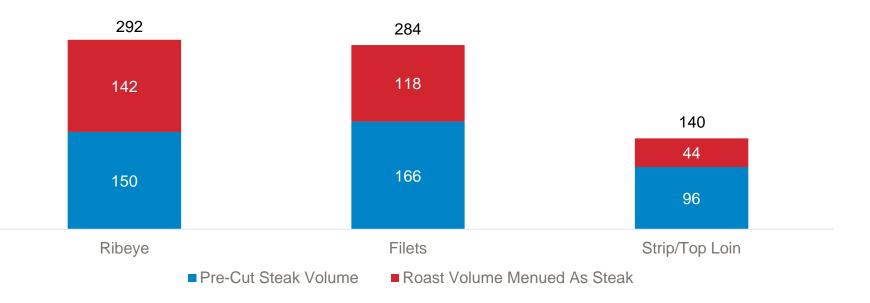
Average Share of Subprimal Roast End Product

Base: Operators using each Subprimal Roast

Pre-Cut Steak and Roast Purchases Menued As Steak*

Due to the higher share of Rib Roast purchases menued as Steak, Ribeye becomes the top volume steak at foodservice when combined with Pre-cut steak volume. When Beef Tenderloin purchases are menued as Steak and combined with pre-cut Filets, this volume also becomes relatively high. Both of these overtake Sirloin as the highest menued Steak, which amounts to 198 million pounds.

Steak Menu Volume (in MM Lbs)



*Assumes pre-cut steak volumes menued as steak.

In-house Fabrication Change

Slightly fewer operators are fabricating inhouse compared to last year, with more indicating no change in volume than in 2017.

In-house fabrication	Total	Total		rants	Hotels		Beyond Restaurants		
	2018	2017	2018	2017	2018	2017	2018	2017	
Increased greatly (by 50% or more)	4%	6%	4%	5%	4%	7%	4%	6%	
Increased significantly (by 10-49%)	10%	16%	14%	14%	4%	22%	8%	16%	
Not much change at all	54%	44%	55%	50%	82%	53%	49%	42%	
Decreased Significantly (by 10-45%)	2%	2%	4%	2%	0%	4%	1%	2%	
Decreased greatly by (50% or more)	1%	2%	1%	1%	1%	1%	1%	2%	
We do not fabricate any Beef in house	28%	31%	22%	28%	8%	14%	36%	32%	

All Other Beef Situation

Observations

• Pre-cooked Roast Beef and Ribs have increased in poundage, Ground Beef is flat and Other Beef is down.

Insights

• Ribs volume increases continue as barbecue continues to increase penetration on menus.

Ground Beef	2018		2017		2018 Ch vs. 2017	
	M Lbs.	\$ M	M Lbs.	\$ M	M Lbs.	\$ M
Patties & Bulk	4,922	\$11,025	4,932	\$11,196	-10	-\$170
Preparations	210	\$535	200	\$497	10	\$37
Total Ground Beef	5,132	\$11,560	5,132	\$11,693	0	-\$133
Total Pre-Cooked Roast Beef	333	\$1,786	322	\$1,659	11	\$126
Ribs						
Short	114	\$464	116	\$423	-2	\$41
Back	26	\$107	21	\$76	5	\$31
Boneless Country-style	18	\$74	16	\$58	2	\$16
Total Ribs	157	\$645	152	\$556	5	\$88
Other						
All Beef Hot Dogs/Brats	208	\$625	220	\$648	-12	-\$23
Strips/Cubes/ Shaved/Shreds*	184	\$896	180	\$877	4	\$19
Specialty Beef Deli Meats	91	\$455	85	\$421	6	\$34
All Other Beef	14	\$49	16	\$52	-2	-\$3
Total Other Beef	497	\$2,025	501	\$1,997	-4	-\$28

Numbers may not add due to rounding Dollar value calculations based on September pricing in respective years.

Summary of Beef Cut Growth/Decline Rationale

In 2018, the main reasons for Beef cut growth are overall business growth are adding specific products to the menu, changing the menu to the cut's benefit, business growth and increased consumer demand. Conversely, decline is mostly attributed to menu elimination/less frequent menuing and declining customer demand.

Roast (Subprimal)	Pre-Cut (14)	Steaks	Roast (Subprin	nal) (10)	Ground	Beef (3)	Ribs (3)		Other B	eef (4)	Total (34	4)
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Primary Rationale for Increase												
Added to the menu	6	5	6	4	1	1	1	1	1	3	15	14
Growth of overall business	4	4	2	6	1	3	1	2	-	1	8	16
More promotions of cut	2	_	_	-	-	-	-	-	-	-	2	-
Lower pricing	1	1	2	-	-	-	1	-	-	-	4	1
Better quality products	1	1	-	-	-	-	-	-	-	-	1	1
Increased customer demand	1	8	3	4	1	-	-	-	1	-	6	12
Menu change benefits	7	1	_	1	1	1	1	1	1	-	10	4
Primary Rationale for Decrease												
Cut taken off the menu	4	5	-	5	-	2	-	-	-	2	4	14
Commodity price increase of cut	1	1	1	-	-	-	-	2	-	-	2	3
Consumer demand down	3	4	3	4	2	-	1	1	2	2	11	11
Price too high for customers	-	4	-	4	-	-	-	-	-	-	-	8
Health concerns	2	_	_	-	-	-	-	-	-	1	2	1
Patron economic situation	-	-	-	1	-	-	-	-	-	-	-	1
Overall business decline	4	1	3	-	-	-	-	1	1	1	8	4
Menu changes negatively impacts product	2	-	-	-	1	1	1	-	1	1	5	2

() = Number of cuts in category

Multiple and no primary reasons possible

Foodservice Beef Product Category Summary

1	Million P	ounds				Price pe	r Pound*			
	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014
Pre-cut Steaks—average						\$9.35	\$8.74	\$8.97	\$10.65	\$10.33
Sirloin	198	217	214	228	244	\$6.95	\$6.60	\$7.70	\$8.25	\$7.30
Filet	166	169	157	144	163	\$16.25	15.50	16.40	21.75	21.75
Ribeye/Rib/Ribeye Cap	150	164	155	153	180	\$11.12	9.75	10.45	12.00	11.10
Flank/Skirt	117	114	117	128	140	\$7.35	5.70	5.32	6.25	6.60
Strip/Top Loin	96	96	89	99	110	\$8.85	8.65	8.30	10.00	9.20
Flat Iron	77	70	53	59	61	\$7.00	7.61	6.90	7.45	7.75
T-Bone/Porter House	54	52	54	54	71	\$10.99	9.30	10.00	10.30	9.50
Petite Tender Medallions	42	33	26	23	34	\$6.95	7.20	7.20	8.65	9.00
Hanger Steak	34	27	19	24	-	\$3.65	3.50	4.00	4.55	-
Tri-Tip	15	12	10	10	14	\$4.40	4.40	4.80	6.20	5.90
Chuck Eye/Delmonico Steak	15	14	11	9	19	\$7.69	7.80	7.00	11.00	11.25
Ranch Cut	13	10	6	7	13	\$4.90	5.40	4.95	5.75	6.00
Denver Steak/Cut	4	2	2	2	2	\$6.80	6.90	6.15	7.85	8.00
Other Steak	27	42	99	34	55	\$5.75	5.50	5.30	6.20	5.90
Roasts (sub-primal)—average						\$6.40	\$5.90	\$6.39	\$7.23	\$7.76
Beef Tenderloin	214	219	198	192	221	\$10.35	\$9.75	\$10.50	\$11.70	\$11.70
Prime Rib	189	200	183	179	190	\$8.75	7.50	8.80	9.85	9.40
Round Roasts	117	120	97	98	99	\$3.17	3.00	3.30	3.90	4.00
Chuck/Shoulder Roasts	110	108	94	105	110	\$3.26	2.90	3.10	3.90	4.00
Brisket	103	88	73	63	42	\$4.40	3.90	4.00	3.50	3.75
Strip/Top Loin	70	70	94	65	-	\$5.00	4.70	4.25	4.50	_
Sirloin Roast	42	50	51	37	20	\$3.75	3.50	4.05	5.45	5.10
Petite Tender	21	16	10	10	10	\$3.75	4.00	3.90	4.25	4.50
Chuck Eye/Underblade	17	20	23	28	39	\$3.90	4.10	4.10	5.15	5.30
Tri-Tip	17	17	15	13	14	\$3.50	3.50	3.70	4.75	4.50

*Average price obtained from distributors. Price is at the distributor sales level (or operator purchases); September of each representative year Avg = Weighted average based on poundage

Foodservice Beef Product Category Summary

	Million P	ounds				Price pe				
	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014
Pre-Cooked Roast Beef										
Total Pre-Cooked Roast Beef	333	322	321	311	356	\$5.36	\$5.15	\$5.10	\$5.30	\$5.50
Ground Beef										
Ground Beef (Bulk & Patties)	4,922	4,932	4,825	4,835	4,902	\$2.24	\$2.27	\$2.00	\$2.50	\$2.65
Ground Beef Preparations	210	200	198	185	191	\$2.54	\$2.48	\$2.25	\$2.75	\$2.85
Ribs										
Short Ribs	114	116	98	95	110	\$4.10	\$3.65	\$4.00	\$3.20	\$3.60
Back Ribs	26	21	15	15	20	\$4.10	\$3.65	\$4.00	\$3.20	\$3.60
Boneless Country-Style	18	16	9	12	18	\$4.10	\$3.65	\$4.00	\$3.20	\$3.60
All Other Beef										
All Beef Hot Dogs/Brats	208	220	215	228	206	\$3.00	\$2.95	\$2.85	\$2.86	\$2.65
Strips/Cubes/Shaved/Shreds	184	180	188	192	163	\$4.87	\$4.87	\$4.65	\$4.65	\$4.44
Specialty Beef Deli Meats	91	85	79	84	84	\$5.00	\$4.95	\$5.00	\$5.00	\$4.80
All Other Beef	14	16	23	24	19	\$3.47	\$3.23	\$3.30	\$3.60	\$3.50

*Average price obtained from distributors. Price is at the distributor sales level (or operator purchases); September of each representative year Avg = Weighted average based on poundage

Beef Cut Pound and Market Value Trends

Overall Beef volume is flat but up 3% in value, indicating some inflation in the market. Some volume growth is evident in Ribs and Pre-Cooked Beef.

Category	Lbs. M						\$M					
	2018	2017	2016	2015	2014	′18 vs. ′17	2018	2017	2016	2015	2014	′18 vs. ′17
Ground Beef	5,132	5,132	5,022	5,020	5,093	0%	\$11,560	\$11,693	\$10,094	\$12,596	\$13,535	-1%
Pre-cut Steaks	1,008	1,022	1,012	973	1,106	-1%	\$9,428	8,940	9,078	10,365	11,429	5%
Roasts (subprimal)*	900	908	838	790	745	-1%	\$5,762	5,362	5,359	5,761	5,782	7%
Other Beef	497	501	505	522	472	-1%	\$2,025	1,997	1,961	2,020	1,738	1%
Pre-Cooked Roast Beef	333	322	321	311	356	3%	\$1,786	1,659	1,639	1,647	1,958	8%
Ribs	157	152	117	122	148	3%	\$645	556	466	488	533	16%
Total	8,028	8,037	7,816	7,737	7,920	0%	\$31,205	\$30,206	\$28,598	\$32,877	\$34,974	3%

Dollar value calculations based on September pricing for each representative year

*Strip/Top Loin was added as a separate category in 2015, which may be artificially inflating volume in roasts, and deflating steak category volume in that year.

2018 Beef Poundage Summary In lbs. millions

	Pre-cut St	eaks*			Roasts (subprima	I)**	Pre- Cooked	Ground Beef	Ribs	All Other Beef***
	Filets	\$8.85- \$11.15	\$6.95- \$7.70	\$3.65- \$5.75	Premium	Mid-Tier	Roast Beef			
LSR	3	24	29	37	33	138	252	2,946	21	153
FSR	110	204	224	96	312	118	29	652	65	80
Bars/Taverns ¹	1	6	4	2	7	4	0	77	4	9
Total Restaurants & Bars	114	234	257	135	352	260	281	3,675	90	242
Lodging	41	31	31	13	46	28	9	106	16	22
Retailers	0	2	4	7	6	14	17	140	7	39
Recreation ¹	3	10	7	5	16	21	4	102	8	53
Healthcare	1	2	6	7	4	11	6	126	7	19
Colleges	2	5	18	13	13	33	6	188	11	22
Schools	0	0	0	2	2	3	2	403	1	47
Business & Industry	1	6	5	15	10	21	3	184	3	16
Military ¹	1	5	4	2	9	19	1	97	4	17
Corrections ¹	0	0	0	1	1	5	0	41	1	6
CCRCs ¹	3	4	4	6	13	12	4	70	9	15
Total Beyond Restaurants	52	66	79	71	121	167	52	1,457	67	256
Total	166	300	336	206	473	427	333	5,132	157	497

*Steaks \$8.85-\$11.15: Porterhouse/T-Bone, Ribeye/Rib/Ribeye Cap, Strip

\$6.95-\$7.70: Denver Steak, Flat Iron, Petite Tender, Sirloin, Chuckeye/Delmonico,

\$3.65-\$5.75 Flank/Skirt, Ranch Cut, Tri-Tip, Hanger, Other Steak

**Roast Premium: Prime Rib, Tenderloin, Strip/Top Loin

Mid-Tier: Chuckeye/Underblade, Chuck/Shoulder, Round, Tri-Tip, Petite Tender, Brisket, Sirloin Roast

***All Other Beef, Hot Dogs/Brats/Sausage, Strips/Cubes/Shreds/Shaved, Specialty Deli Meats, All Other Beef

¹Segment not researched 2018. 2017 data used as surrogates for this segment

Numbers may not add due to rounding.

2018 vs. 2017 Change in Beef Poundage

In lbs. millions

Segment	Pre-cut St	eaks*			Roasts (subprima	I)**	Pre- Cooked	Ground Beef	Ribs	All Other Beef***
	Filets	\$8.85- \$11.15	\$6.95- \$7.70	\$3.65- \$5.75	Premium	Mid-Tier	Roast Beef			
LSR	1	1	0	-1	8	11	0	-26	5	-10
FSR	3	4	13	27	7	19	1	42	6	10
Bars/Taverns ¹	0	0	0	0	0	0	0	0	0	0
Total Restaurants & Bars	4	5	13	26	15	30	1	16	11	0
Lodging	-8	-11	-8	-7	-20	-6	3	-4	-2	4
Retailers	-1	-3	-1	-5	-4	-7	11	17	-4	3
Recreation ¹	0	0	0	0	0	0	0	0	0	0
Healthcare	0	-1	0	-5	-1	-3	0	0	-1	-5
Colleges	1	0	-3	-3	-3	-8	-1	8	-1	-4
Schools	0	0	0	1	0	1	-1	-2	11	-2
Business & Industry	1	-2	-1	-6	-4	1	-2	-18	1	1
Military ¹	0	0	0	0	0	0	0	0	0	0
Corrections ¹	0	0	0	0	0	0	0	0	0	0
CCRCs ¹	0	0	0	0	0	0	0	0	0	0
Total Beyond Restaurants	-7	-17	-13	-25	31	-22	10	-16	-6	-4
Total	-3	-12	0	1	-16	8	11	110	5	-4

*Steaks \$8.85-\$11.15: Porterhouse/T-Bone, Ribeye/Rib/Ribeye Cap, Strip

\$6.95-\$7.70: Denver Steak, Flat Iron, Petite Tender, Sirloin, Chuckeye/Delmonico,

\$3.65-\$5.75 Flank/Skirt, Ranch Cut, Tri-Tip, Hanger, Other Steak

**Roast Premium: Prime Rib, Tenderloin, Strip/Top Loin

Mid-Tier: Chuckeye/Underblade, Chuck/Shoulder, Round, Tri-Tip, Petite Tender, Brisket, Sirloin Roast

***All Other Beef, Hot Dogs/Brats/Sausage, Strips/Cubes/Shreds/Shaved, Specialty Deli Meats, All Other Beef

¹Segment not researched 2018. 2017 data used as surrogates for this segment

Numbers may not add due to rounding.

Pre-cut Steak Product Penetration

Pre-cut Steak Type	2018	2017	2016	2015	2014
Ribeye/Rib/Ribeye Cap	14%	16%	14%	15%	21%
Flat Iron	13%	10%	4%	5%	6%
Sirloin	12%	15%	12%	14%	19%
Strip	12%	12%	8%	11%	15%
Filet	11%	11%	8%	7%	11%
Flank/Skirt	11%	10%	10%	13%	15%
T-Bone/Porterhouse	9%	8%	7%	6%	10%
Hanger Steak	7%	5%	2%	4%	-
Petite Tender	7%	5%	2%	2%	4%
Chuck Eye/Delmonico	5%	3%	1%	2%	6%
Ranch Cut	5%	3%	1%	1%	1%
Tri-Tip	4%	3%	1%	2%	2%
Denver Steak/Cut	3%	2%	1%	1%	1%
Other Steaks	4%	5%	29%	8%	9%
Any Pre-cut Steak	42%	45%	41%	42%	48%

Hanger steak added in 2015.

Roast (Subprimal) Product Penetration

% Operators Using-Weighted Average Based on Units

Roast (Subprimal) Type	2018	2017	2016	2015	2014
Brisket	26%	20%	14%	12%	11%
Strip/Top Loin	21%	25%	29%	13%	_
Rib/Ribeye/Ribeye/Prime Rib	19%	16%	18%	18%	21%
Tenderloin	18%	19%	15%	13%	19%
Chuck/Shoulder	14%	11%	8%	10%	10%
Round Roast	14%	13%	7%	8%	8%
Sirloin	12%	15%	13%	8%	8%
Petite Tender	8%	5%	1%	2%	3%
Tri-Tip	8%	6%	4%	3%	3%
Chuck Eye/Underblade	5%	5%	5%	7%	10%
Any Roast (subprimal)	46%	45%	38%	36%	40%

Ground Beef and Rib Penetration

Ground Beef patty and bulk penetration is up in 2017, as is penetration of Ribs.

Ground Beef Type	2018	2017	2016	2015	2014
Patties and Bulk	74%	73%	67%	70%	74%
Preparations	24%	24%	18%	17%	17%
Any Ground Beef	75%	77%	77%	75%	74%
Short Ribs	16%	16%	10%	9%	14%
Back Ribs	8%	4%	3%	3%	3%
Boneless Country-Style Ribs	8%	5%	1%	2%	4%
Any Ribs	24%	22%	14%	14%	15%

% Operators Using-Weighted Average Based on Units

Other Beef Product Penetration

All Beef Hot Dog/Brat/Sausage and Specialty Deli Meat penetration has increased in 2017.

Other Beef Product	2018	2017	2016	2015	2014
All Beef Hot Dogs/Brats/Sausage	37%	38%	36%	39%	35%
Specialty Deli Meats	26%	26%	23%	22%	24%
Beef Strips/Cubes/Shreds/Shaved*	29%	27%	27%	30%	25%
All Other Beef*	5%	6%	8%	10%	8%

% Operators Using—Weighted Average Based on Units

*Category redefined in 2015

Chicken Product Penetration

Chicken Product	2018	2017	2016	2015
Further Processed Chicken	53%	63%	73%	68%
Boneless Chicken	68%	65%	62%	58%
All Other Chicken	7%	8%	19%	26%
Bone-in Chicken	38%	35%	27%	18%

% Operators Using-Weighted Average Based on Units

Note: Historical data not possible due to category redefinition in 2015.

Usage of Value-added Pre-cut Steaks

Operators were asked if they were using any value-added Pre-cut Steaks, defined as products that are purchased pre-cooked, preseasoned, pre-marinated or mechanically tenderized. Usage of value-added Pre-cut Steaks is still relatively low, however Chuck Eye/Delmonico and Denver Steak/ Underblade have the highest percentage of operators using some form of value-added product.

Pre-Cut Steak	Pre-C	Pre-Cooked 2018 2017 2016 2015 2014				Pre-S	eason	ed			Pre-N	larinat	ed			Mechanically Tenderized				
Туре	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014
ChuckEye/ Delmonico	13%	7%	0%	5%	0%	20%	17%	0%	5%	0%	13%	12%	0%	5%	0%	20%	7%	0%	5%	0%
Denver Steak/ Underblade	5%	18%	0%	13%	0%	35%	35%	0%	13%	0%	20%	29%	0%	13%	11%	15%	18%	0%	13%	0%
Filet	4%	3%	3%	4%	0%	8%	6%	2%	5%	1%	4%	7%	0%	8%	5%	5%	5%	3%	3%	3%
Flank/ Skirt	5%	2%	5%	0%	2%	9%	7%	8%	4%	7%	12%	9%	7%	5%	2%	10%	5%	8%	3%	2%
Flat Iron	2%	4%	0%	2%	2%	6%	10%	6%	10%	2%	10%	14%	0%	9%	2%	14%	8%	3%	9%	7%
Hanger Steak	6%	4%	10%	4%	-	6%	9%	10%	7%	-	6%	11%	5%	7%	-	10%	13%	10%	4%	_
Petite Tender	5%	10%	0%	6%	0%	10%	13%	0%	12%	1%	5%	12%	0%	12%	10%	13%	8%	0%	6%	0%
Porterhouse/ T-Bone	6%	5%	3%	0%	2%	15%	12%	3%	5%	0%	8%	15%	3%	12%	2%	10%	7%	5%	7%	0%
Ranch Cut	6%	17%	0%	14%	0%	16%	14%	0%	14%	0%	19%	17%	0%	14%	0%	13%	17%	0%	14%	0%
Ribeye/Rib/ Ribeye Cap	5%	4%	1%	1%	2%	9%	5%	4%	5%	3%	4%	10%	2%	3%	2%	9%	6%	4%	6%	1%
Sirloin	4%	4%	3%	1%	1%	5%	4%	8%	4%	3%	12%	10%	14%	9%	5%	8%	7%	12%	3%	3%
Strip/Top Loin	4%	5%	5%	0%	1%	7%	6%	2%	2%	0%	10%	9%	5%	2%	2%	11%	3%	9%	4%	1%
Tri-Tip	15%	6%	0%	0%	0%	18%	12%	0%	0%	0%	6%	9%	8%	0%	0%	15%	3%	0%	11%	0%
Other	4%	8%	31%	21%	5%	19%	16%	31%	21%	5%	12%	1%	11%	4%	3%	23%	19%	33%	41%	7%

– = Not probed
 Hanger steak added in 2015. Multiple mentions accepted.

Base: Users of each category.

Usage of Value-added Roast (Subprimal), Ground Beef

Value-added characteristics are not very common in Roasts, except for Brisket and Chuck Eye/Underblade.

Roast						Pre-S	eason	ed			Pre-N	larinat	ed			Mechanically Tenderized				
(subprimal) Type	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014
Chuck Eye/ Underblade*	8%	4%	11%	9%	7%	23%	13%	4%	4%	7%	13%	9%	4%	3%	4%	5%	1%	6%	4%	3%
Beef Tenderloin	7%	5%	1%	3%	2%	0%	0%	X	Х	X	0%	0%	Х	Х	X	8%	9%	7%	2%	0%
Brisket**	10%	18%	Х	Х	Х	7%	14%	X	Х	X	9%	12%	Х	Х	X	7%	4%	0%	9%	10%
Chuck/Shoulder	6%	6%	5%	7%	5%	9%	9%	3%	6%	1%	4%	6%	3%	6%	2%	12%	4%	4%	3%	2%
Petite Tender	9%	7%	5%	11%	0%	8%	12%	5%	11%	5%	6%	7%	0%	11%	5%	11%	3%	11%	11%	5%
Prime Rib	4%	6%	11%	13%	6%	7%	5%	7%	8%	6%	6%	7%	7%	10%	3%	9%	5%	5%	3%	0%
Round	2%	4%	15%	7%	12%	2%	4%	12%	6%	8%	2%	6%	7%	4%	2%	6%	4%	6%	4%	2%
Sirloin Roasts	5%	3%	5%	2%	3%	14%	6%	6%	1%	3%	7%	8%	7%	4%	2%	11%	4%	7%	3%	4%
Strip/Top Loin**	10%	6%	20%	14%	-	0%	0%	X	Х	-	0%	0%	Х	Х	-	14%	7%	30%	31%	-
Tri-Tip**	1%	2%	0%	4%	3%	7%	2%	0%	0%	0%	10%	6%	0%	2%	0%	17%	9%	0%	0%	0%
Ground Beef																				
Patties**	17%	21%	41%	37%	-	17%	21%	19%	20%	-	Х	x	X	Х	-	x	X	Х	Х	-
Bulk	4%	-	-	-	-	3%	-	-	-	-	3%	-	-	-	-	2%	-	-	-	-
Preparations	48%	56%	54%	_	-	32%	44%	66%	_	-	х	x	X	Х	x	x	X	Х	Х	x

*Small base.

**Sub-Category added in 2015

X = Value-add feature not probed/relevant

Multiple mentions accepted. Base: Users of each category

Usage of Value-added Ribs and Other Beef

Value-added feature usage is relatively high within Other Beef products.

Ribs	Pre-Cooked					Pre-Seasoned					Pre-Marinated					Mechanically Tenderized				
	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014
Boneless Country-Style Ribs	17%	21%	33%	19%	19%	26%	23%	17%	15%	24%	15%	18%	8%	12%	19%	10%	8%	0%	х	x
Short Ribs	10%	11%	13%	11%	16%	9%	13%	11%	9%	19%	6%	10%	10%	6%	16%	6%	6%	0%	x	x
Back Ribs	4%	16%	19%	20%	11%	14%	24%	8%	20%	10%	8%	13%	8%	9%	10%	x	x	X	x	x
Other Beef Type																				
All Beef Hot Dogs/Brats/ Sausage	30%	34%	56%	45%	47%	17%	27%	28%	21%	21%	4%	9%	10%	6%	5%	7%	6%	0%	x	x
Strips/Cubed/ Shreds/Shaved	8%	15%	28%	23%	18%	13%	22%	25%	22%	19%	8%	9%	18%	12%	10%	17%	12%	0%	х	x
Specialty Beef Deli Meats	33%	46%	75%	74%	60%	22%	35%	57%	61%	65%	8%	15%	40%	38%	33%	5%	8%	0%	Х	x
All Other	18%	19%	26%	18%	0%	18%	36%	28%	15%	0%	4%	13%	9%	5%	0%	11%	17%	0%	x	x

X = Value-add feature not probed/relevant

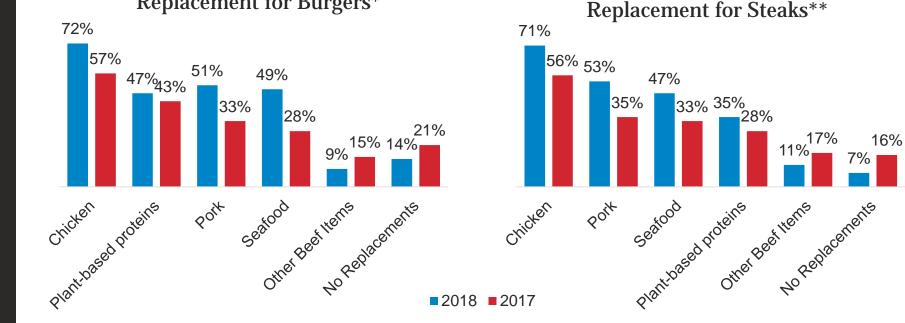
Multiple mentions accepted. Base: Users of each category

Beef Menu Replacements

Among operators indicating they plan on reducing the number of Burgers/Ground Beef on the menu, the main protein they plan using as a replacement is Chicken. Compared to 2017, the percentage indicating pork and seafood has also increased significantly.

As with Burgers/Ground Beef, most operators planning on reducing the number of Steaks on the menu report that Chicken will be the replacement. Pork and Seafood has increased significantly as a potential replacement for Steaks, and plant-based Protein has increased slightly

For both Burgers and Steak replacements, few menu Other Beef items.



*Operators indicating they plan on decreasing the number of Burgers/Ground Beef items on the menu **Operators indicating they plan on decreasing the number of Steak items on them menu Multiple mentions accepted.

© 2018 Technomic Inc. Source: 2018 Usage and Volumetrics Assessment of Beef in Foodservice Study

Replacement for Burgers*

Importance of Steak On the Menu

Operators were asked to indicate how important are a number of possible benefits that Steak provides to their businesses. Optimism relative to Steak's benefits is very high this year on all areas, and outpaces all previous years shown.

	iving a c	ning o					P 2 DOX	Respon	1963)							
Category	АШ					FSR					Lodging					
	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014	
Steak increases traffic	62%	45%	34%	29%	39%	72%	56%	38%	39%	53%	75%	51%	49%	41%	47%	
Steak drives check average.	72%	53%	-	_	_	82%	68%	_	_	-	86%	65%	_	_	-	
Steak can make a successful LTO	65%	45%	30%	30%	34%	73%	53%	39%	30%	36%	80%	53%	16%	39%	33%	
Steak brings in bigger parties	57%	38%	25%	25%	30%	63%	45%	32%	29%	41%	70%	48%	28%	24%	38%	
Steak eliminates the Veto Vote in a party	49%	28%	18%	14%	19%	55%	35%	18%	18%	22%	59%	38%	16%	15%	21%	

Importance of Having a Strong Steak Presence on the Menu (Top 2 Box Responses)

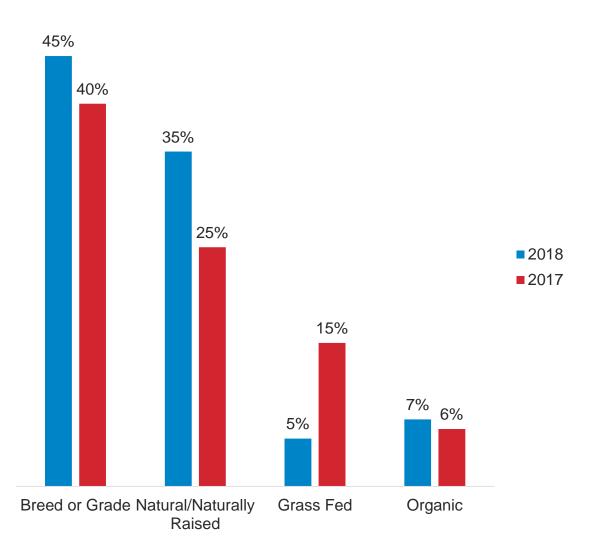
1 to 5 scale used: 1 = not important advantage of steak; 5 =Very important advantage of steak. Base: Operators offering steak

Production or Marketing Claims

Operators were asked to indicate what percent of their total Beef purchases came with a production or marketing claims.

- On average, the typical operator states that 45% of their Beef purchases indicate a Breed or Grade. This is up slightly from 2017.
- On average, Natural or Naturally Raised Beef is also up.
- Grass-fed Beef is down, while organic is generally flat.

Production or Marketing Claims Average % of Purchases with Claim



Base: All operators using Beef

Questions?





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