MenuStat Methods

Data Source

MenuStat contains nutrition data collected from the largest 100 restaurant chains in the country, by U.S. sales (Nation's Restaurant News). Data on MenuStat are sourced from restaurant websites, and so only restaurants that post nutrition information online are available in MenuStat. View the *Restaurant Data Availability* chart available on MenuStat's About Page for a list of restaurants available in MenuStat by year.

Data Collection

MenuStat data are collected annually in January. When restaurant websites provide nutrition information in multiple formats, item-level nutrition information (e.g. nutrition for each item is on its own page) is used as a primary source. Data from other formats (e.g. nutrition tables) supplement missing information. Starting in the 2018, when restaurant websites provide nutrition information in multiple formats, nutrition tables are used to source nutrition information.

Data Details

All items that appear on a restaurant's website are cleaned prior to upload onto MenuStat. Items with identical names and descriptions that appear on restaurant website in subsequent years are 'matched' by a unique Menu Item ID that can be viewed when data are exported. Each menu item is coded into a mutually exclusive food category. Researchers can re-categorize menu items upon download. Nutrition information and serving size are entered for each menu item as they appear on the restaurant's website, wherever available. For a limited number of items, serving size is converted to grams for foods and to ounces for beverages for ease of comparison; these cases are marked by an asterisk. Each menu item is also given a binary code for the following features: On the Kids Menu; Limited Time Offer; Regional; Shareable; Combo Meal. This coding is based on descriptions from the restaurant website. Between 2013 and 2017 all variations of beverages (e.g. flavor, milk type, sweetener, etc.) were entered. In other years, only the default variation were entered.

Restaurants sometimes report nutrition separately for items consumed together. For example, the nutrition for mozzarella sticks may be listed separately from the accompanying marinara sauce. On the Search Results Page, main items can be viewed with their accompaniments by clicking "View Customizable Items and Meals" when one year of data is selected. When these data are exported from the Search Results Page or when "Annual Data with Customizable Items and Meals" is selected from the Export tab of the homepage, these customizable items and meals are identified with a Customizable Build ID, which is unique to each year of data. Combo meals (in which an entree, a side and a drink are all accounted for in the nutrition information) as well as components of combo meals are coded and can be viewed when these data are exported.

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Nutrition data from the largest 200 restaurant chains in the country, by U.S. sales, were used in prior versions of the website. In the current version of the website, all years of data were cleaned and coded to improve usability in the following ways. First, nutrition information was divided by the number of servings, when available, so that nutrition information represents a single serving. Second, egg and meat sides were re-coded from the Entrees category into the Appetizers & Sides category. Email MenuStat@health.nyc.gov to receive data used in prior versions of the website.

Summary Data Details

The MenuStat results page lists the mean and range for each nutrient in the Summary Data section. When there is more than one year of data in the results, the mean is calculated by averaging the mean from each year; ranges are the highest and lowest values from all menu items in all years. Summary Data are available for nutrition per serving and nutrition per 100 g ("nutrient density"). Nutrient densities are only available for menu items for which the weight of an item in grams is available. The Summary Data accounts for main items only and does not include the added accompaniments when "View Customizable Items and Meals" is selected. Any nutrient values that are not numeric because they include a range (e.g. 5-12 g fat) or a symbol (e.g. <1 g fiber) are excluded from Summary Data mean calculations. However, researchers can choose to add the non-numeric values into analyses because they are included in the export, but separated into a different variable than the numeric nutrient values.

Some restaurants post incomplete nutrition information on their websites; some may report only calories. The sample size appears in parentheses in the Summary Data.

Data Completeness

Menu items without nutrition data and limited nutrition data are collected to help provide a complete picture of a restaurant's menu and to allow for trends to be tracked over time. For a description of the dataset, including data completeness, and variables that can be exported, please refer to the *MenuStat Codebook*.

Accuracy

Nutrition values are entered as they are presented on restaurant websites. MenuStat may not always reflect current restaurant website information as data collection occurs annually.

Data Limitations

Information presented in MenuStat reflects the completeness and accuracy of data as presented on restaurant websites. Users may email the NYC Health Department at MenuStat@health.nyc.gov to receive source material. Source materials can be used to verify data entry and code additional criteria of interest.

MenuStat Codebook
Definitions for the variables in your export

Variable Name	Description
Menu Item ID	A unique identifier for each item. When the same item is served by a restaurant over multiple years it has an identical Menu Item ID to allow for tracking.
Customizable Build ID	Available when the data is exported with customizable items and meals. A unique identifier for menu items that are part of the same customizable build. The identifier is unique to each year of data.
Customizable Builds	Available when the data is exported with customizable items and meals. Menu items that are part of the same customizable build are labeled as either a main item or an accompanying item.
Restaurant	Restaurant name.
Item Name	Menu item name.
Item Description	Menu item name with additional menu information (e.g. menu item components).
Serving Size Unit (in grams or ounces)	Available whenever reported by restaurants. For a limited number of items, serving size was converted to grams for foods and to ounces for beverages; these cases are marked by an asterisk.
Serving Size Household	Household metric reported to describe serving size (e.g. 1 Slice).
Variable text	Serving size and nutrient variables reported in a non-specific values (e.g. ≤1).
Variable 100 g	Nutrient density is calculated by standardizing the serving size to 100 g when serving size and nutrient information is reported by the restaurant.
Kids Meal	Coded as '1' if the restaurant describes the item as being for kids. Items described as for kids and adults (e.g. kids fries = small fries) says 'Kids and Adults Menu' in the Item Description.
Limited Time Offer	Coded as '1' if the restaurant describes the item as a limited time offer or seasonal.
Regional	Coded as '1' if the restaurant describes the item as regional (e.g. Midwest states only or at participating locations only).
Combo Meal	Coded as '1' if the restaurant describes the item as including an entrée with a side and drink. Combination meals and components can only be viewed with customizable items and meals in exported data.
Shareable	Coded as '1' if the restaurant describes the item as shareable and the nutrition cannot be divided in to a single serving (e.g. carafes, whole pies, quarts of ice cream, 2 liter drinks).

Data Descriptives

MenuStat Data Completeness Documentation

	2008		2010		2012		2013		2014		2015		2016	
Total N	7807		8623		16163		23860		25278		28666		33916	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Food Category														
Appetizers & Sides	485	6.2	582	6.2	963	6.0	1138	4.8	1321	5.2	1626	5.7	1874	5.5
Baked Goods	399	5.1	295	5.1	570	3.5	796	3.3	917	3.6	947	3.3	948	2.8
Beverages	1826	23.4	2402	23.4	4584	28.4	9319	39.1	9019	35.7	11111	38.8	13817	40.7
Burgers	318	4.1	299	4.1	554	3.4	601	2.5	664	2.6	797	2.8	773	2.3
Desserts	489	6.3	639	6.3	1119	6.9	1389	5.8	1399	5.5	1362	4.8	1521	4.5
Entrees	986	12.6	1224	12.6	2099	13.0	2481	10.4	2923	11.6	3586	12.5	3762	11.1
Fried Potatoes	148	1.9	164	1.9	254	1.6	296	1.2	301	1.2	363	1.3	355	1.0
Pizza	373	4.8	389	4.8	704	4.4	756	3.2	881	3.5	1043	3.6	1443	4.3
Salads	265	3.4	273	3.4	473	2.9	588	2.5	738	2.9	882	3.1	876	2.6
Sandwiches	915	11.7	961	11.7	1841	11.4	2497	10.5	2668	10.6	2785	9.7	3055	9.0
Soup	208	2.7	211	2.7	325	2.0	488	2.0	493	2.0	576	2.0	561	1.7
Toppings & Ingredients	1395	17.9	1184	17.9	2677	16.6	3511	14.7	3954	15.6	3588	12.5	4931	14.5

	2017		2018	
Total N	35099		30120	
	n	%	n	%
Food Category				
Appetizers & Sides	2037	5.8	2086	6.9
Baked Goods	968	2.8	940	3.1
Beverages	14022	39.9	9374	31.1
Burgers	792	2.3	766	2.5
Desserts	1589	4.5	1427	4.7
Entrees	3669	10.5	3910	13.0
Fried Potatoes	378	1.1	362	1.2
Pizza	1738	5.0	1635	5.4

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Salads	905	2.6	902	3.0
Sandwiches	2951	8.4	3440	11.4
Soup	586	1.7	589	2.0
Toppings & Ingredients	5464	15.6	4689	15.6

	2008		2010		2012		2013		2014		2015		2016	
Serving Size & Nutrients														
Serving Size														
Numeric values	5993	37.1	6582	76.3	9505	58.8	13769	57.7	13533	53.5	14351	50.1	13425	39.6
Ranges or non-specific values	0	0.0	14	0.2	23	0.1	15	0.1	23	0.1	45	0.2	31	0.1
Calories														
Numeric values	7617	47.1	8508	98.7	15087	93.3	21722	91.0	22841	90.4	24461	85.3	29065	85.7
Ranges or non-specific values	5	0.0	99	1.1	71	0.4	60	0.3	112	0.4	147	0.5	106	0.3
Density (per 100 g)	5888	36.4	6564	76.1	9465	58.6	13619	57.1	13486	53.4	14055	49.0	13354	39.4
Total Fat g														
Numeric values	7719	47.8	8296	96.2	14655	90.7	21689	90.9	22441	88.8	24209	84.5	28944	85.3
Ranges or non-specific values	2	0.0	59	0.7	38	0.2	66	0.3	47	0.2	83	0.3	59	0.2
Density (per 100 g)	5945	36.8	6555	76.0	9482	58.7	13631	57.1	13152	52.0	14017	48.9	13344	39.3
Saturated Fat g														
Numeric values	7397	45.8	8261	95.8	14883	92.1	21187	88.8	21865	86.5	23648	82.5	28235	83.2
Ranges or non-specific values	3	0.0	62	0.7	37	0.2	64	0.3	45	0.2	66	0.2	46	0.1
Density (per 100 g)	5797	35.9	6488	75.2	9464	58.6	13388	56.1	13095	51.8	13942	48.6	13253	39.1
Trans Fat g														
Numeric values	6367	39.4	6969	80.8	12629	78.1	18962	79.5	19937	78.9	21037	73.4	26682	78.7
Ranges or non-specific values	0	0.0	10	0.1	20	0.1	51	0.2	23	0.1	27	0.1	17	0.1
Density (per 100 g)	5464	33.8	5981	69.4	8670	53.6	12755	53.5	12570	49.7	13478	47.0	12919	38.1
Cholesterol mg														
Numeric values	7000	43.3	7044	81.7	12789	79.1	18190	76.2	19392	76.7	22052	76.9	27354	80.7
Ranges or non-specific values	13	0.1	59	0.7	54	0.3	210	0.9	64	0.3	157	0.5	142	0.4
Density (per 100 g)	5860	36.3	6244	72.4	9132	56.5	12665	53.1	12530	49.6	13839	48.3	13168	38.8
Sodium mg														
Numeric values	7440	46.0	8232	95.5	15076	93.3	21701	91.0	22417	88.7	24347	84.9	28845	85.0

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	Col1		Col2		Col3		Col4		Col5		Col6		Col7	
Ranges or non-specific values	0	0.0	102	1.2	64	0.4	57	0.2	75	0.3	110	0.4	85	0.3
Density (per 100 g)	5959	36.9	6468	75.0	9466	58.6	13616	57.1	13146	52.0	14043	49.0	13335	39.3
Potassium mg														
Numeric values	297	1.8	23	0.3	365	2.3	344	1.4	595	2.4	516	1.8	502	1.5
Ranges or non-specific values	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0
Density (per 100 g)	297	1.8	11	0.1	248	1.5	230	1.0	233	0.9	260	0.9	271	0.8
Total Carbohydrates g														
Numeric values	7732	47.8	8529	98.9	15048	93.1	21656	90.8	22382	88.5	24241	84.6	28780	84.9
Ranges or non-specific values	12	0.1	86	1.0	86	0.5	105	0.4	104	0.4	167	0.6	167	0.5
Density (per 100 g)	5968	36.9	6564	76.1	9455	58.5	13607	57.0	13123	51.9	14009	48.9	13317	39.3
Protein g														
Numeric values	7462	46.2	7600	88.1	14930	92.4	21575	90.4	22383	88.5	24099	84.1	28646	84.5
Ranges or non-specific values	7	0.0	57	0.7	116	0.7	125	0.5	94	0.4	171	0.6	227	0.7
Density (per 100 g)	5824	36.0	6515	75.5	9444	58.4	13616	57.1	13144	52.0	13993	48.8	13274	39.1
Sugar g														
Numeric values	6479	46.0	6781	78.6	12575	77.8	18342	76.9	19290	76.3	22099	77.1	27222	80.3
Ranges or non-specific values	19	0.0	22	0.3	87	0.5	104	0.4	112	0.4	180	0.6	229	0.7
Density (per 100 g)	5430	36.9	6061	70.3	9069	56.1	12941	54.2	12362	48.9	13788	48.1	13055	38.5
Dietary Fiber g														
Numeric values	7533	46.6	7757	89.9	14203	87.9	20835	87.3	21462	84.9	23580	82.3	27840	82.1
Ranges or non-specific values	100	0.6	137	1.6	215	1.3	243	1.0	247	1.0	259	0.9	831	2.5
Density (per 100 g)	5843	36.2	6449	74.8	9341	57.8	13456	56.4	12897	51.0	13870	48.4	13142	38.7

2017		**2018**	
15016	42.8	11883	39.5
17	0.0	22	0.1
28697	81.8	26618	88.4
133	0.4	170	0.6
14303	40.8	11575	38.4

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28425	81.0	26421	87.7
56	0.2	13	0.0
14241	40.6	11445	38.0
27735	79.0	26408	87.7
44	0.1	6	0.0
13842	39.4	11443	38.0
26534	75.6	24969	82.9
3	0.0	7	0.0
13242	37.7	10586	35.1
27192	77.5	26027	86.4
205	0.6	153	0.5
13745	39.2	11381	37.8
28447	81.0	26544	88.1
72	0.2	21	0.1
14285	40.7	11568	38.4
660	1.9	438	1.5
1	0.0	1	0.0
358	1.0	265	0.9
28039	79.9	26249	87.1
347	1.0	287	1.0
14193	40.4	11399	37.8
28016	79.8	26217	87.0
280	0.8	187	0.6
14156	40.3	11375	37.8

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26895	76.6	26036	86.4
354	1.0	237	0.8
13754	39.2	11453	38.0
27520	78.4	25920	86.1
477	1.4	334	1.1
14057	40.0	11334	37.6

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