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The Fast-Casual Conundrum: Fast-Casual Restaurant Entrées Are Higher in Calories than Fast Food

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ABSTRACT

Background Frequently eating fast food has been associated with consuming a diet high in calories, and there is a public perception that fast-casual restaurants (eg, Chipotle) are healthier than traditional fast food (eg, McDonald's). However, research has not examined whether fast-food entrées and fast-casual entrées differ in calorie content.

Objective The purpose of this study was to determine whether the caloric content of entrées at fast-food restaurants differed from that found at fast-casual restaurants.

Design This study was a cross-sectional analysis of secondary data. Calorie information from 2014 for lunch and dinner entrées for fast-food and fast-casual restaurants was downloaded from the MenuStat database.

Outcome measures Mean calories per entrée between fast-food restaurants and fast-casual restaurants and the proportion of restaurant entrées that fell into different calorie ranges were assessed.

Statistical analyses performed A *t* test was conducted to test the hypothesis that there was no difference between the average calories per entrée at fast-food and fast-casual restaurants. To examine the difference in distribution of entrées in different calorie ranges between fast-food and fast-casual restaurants, χ^2 tests were used.

Results There were 34 fast-food and 28 fast-casual restaurants included in the analysis (n=3,193 entrées). Fast-casual entrées had significantly more calories per entrée (760±301 kcal) than fast-food entrées (561±268; $P<0.0001$). A greater proportion of fast-casual entrées compared with fast-food entrées exceeded the median of 640 kcal per entrée ($P<0.0001$).

Conclusions Although fast-casual entrées contained more calories than fast-food entrées in the study sample, future studies should compare actual purchasing patterns from these restaurants to determine whether the energy content or nutrient density of full meals (ie, entrées with sides and drinks) differs between fast-casual restaurants and fast-food restaurants. Calorie-conscious consumers should consider the calorie content of entrée items before purchase, regardless of restaurant type.

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ACCORDING TO 2010 DATA IN THE UNITED STATES, 68.8% of the adult population are categorized as overweight (body mass index between 25.0 and 29.9) or obese (body mass index >30.0).[1] There has been a growing interest in public health efforts that target reducing fast-food consumption as a potential way to decrease intake of calories and fat.[2] Recent statistics from the National Health and Nutrition Examination Survey indicate that US adults consume 11.3% of their daily caloric intake from fast food, with adults classified as obese consuming 13.1% of their calories from fast food.[3] Frequent fast-food consumption has been found to be associated with a greater intake of calories and fat,[4-6] and higher fat intake and consumption of fewer vegetables among African-American[7] and non-Hispanic white adults.[8]

Fast-casual restaurants are a relatively new branch of quick-service restaurants gaining popularity because they are perceived as healthier and fresher alternatives to fast food.[9,10] For the purposes of this study, fast-food restaurants are defined as restaurants with a typical meal price of $5 that offer minimal service, emphasize convenience and affordability in their advertising, and generally have drive-thrus.[9,11] In contrast, fast-casual restaurants are defined as restaurants with a typical meal price of $9 to $13 offering limited services that emphasize flavor and/or freshness in their advertising.[9,11] Although fast-casual restaurants are becoming more popular in part due to their perceived freshness and healthy ingredients,[12] there is no evidence at this time that fast-casual meals are healthier than fast food. Fast-casual restaurant chains have seen increased business

by promoting more "socially responsible practices," such as only using "antibiotic-free" meat products (eg, Chipotle),[13] with some offering sustainable and locally grown foods.[11,14] Fast-casual restaurant sales have increased an average 6.5% each quarter for the past 5 years, largely driven by expansion of fast-casual chain locations.[15] As a result of the growing popularity of fast-casual restaurants, fast-food restaurants are increasingly offering more fresh food and healthier options to stay competitive.[11]

A wide selection of different types of fast-food, fast-casual, and other restaurants are available to consumers. However, more research is needed to better understand the difference in calorie content of menu items offered at different types of restaurant chains so public health practitioners and consumers can be informed in recommending and choosing healthier dining choices away from home. A recent study used data from 2010 collected from restaurant websites (and directly from restaurants where necessary) to investigate the calorie content of food at a variety of restaurant chains.[16] The results show that main entrées (not including salads) at fast-food restaurants have fewer calories than entrées at family-style restaurants but more calories than entrées at upscale restaurants.[16] However, the study focus was on the availability of nutrition information at chain restaurants, the way menu items compared with national nutrition standards, and the potential influence of menu labeling, as opposed to a controlled comparison between specific menu offerings at different restaurant types.[16] The purpose of this study was to compare the calorie content of lunch and dinner entrées offered at US fast-food and fast-casual restaurants listed in the MenuStat database (New York City Department of Health and Mental Hygiene) to test the hypothesis that there was no significant difference in calorie content of entrées between fast-food and fast-casual restaurants.

METHODS

Data Collection

Energy content of menu items at fast-food and fast-casual restaurants for the most recent year available (2014) was obtained from the MenuStat database. This database contains nutrition information for menu items at the top-200 grossing restaurant chains and 90.0% of menu items in the database include the calorie content of a menu item.[17] Nutrition information in the MenuStat database is collected from publicly available data listed on restaurant websites. MenuStat gathered the data in January 2014 and it was downloaded and analyzed in June 2015. The information downloaded for each restaurant included name of the menu item, description of the menu item, menu categories (eg, entrée, sandwich, and salad), and calories. The study protocol was exempt from institutional review board approval under federal regulation 45 46.101 (b) CFR.[18]

Classification of Restaurants

Two coders independently reviewed and categorized the 150 restaurants in the MenuStat database as fast-food restaurants, fast-casual restaurants, coffee shops, sit-down restaurants, pizza restaurants, or "other" (ie, did not sell entrées). During the initial independent coding of restaurants, the coders reached consensus on 133 out of 150 restaurants (88.7%). The independent coders then worked with a third member of the research team to review discrepancies and reach consensus on restaurant classification. Only restaurants that had counter service (ie, were not sit-down restaurants) and offered single-serve (ie, not family style) lunch or dinner entrées were included in the analysis. This excluded coffee shops that did not serve lunch and dinner entrées, convenience stores, and pizza restaurants. Of the original 150 restaurants, 88 were excluded in the following categories: coffee shops (n=3), sit-down restaurants (n=59), pizza restaurants (n=13), and establishments not serving entrées (ie, ice cream shops and convenience stores [n=13]). A finalized list of 62 restaurants were included for analysis (34 fast-food restaurants and 28 fast-casual restaurants). The final list of restaurants represented all full-service fast-food and fast-casual restaurants in the top-200 grossing US chains that had published nutrition data available, thus representing a large market share of US casual dining.

Inclusion of Menu Items

Full-size (ie, not "half" or "mini") entrées, burgers, salads, and sandwiches were included in this analysis. Children's menu items, desserts, baked goods, beverages, fried potatoes, soup, breakfast items, and beverages were excluded. Three restaurants did not provide standard menu items, but rather customizable menu options, where the consumer selects ingredients for his or her entrée. In these cases, the research team created standard entrées. For each individual menu option at these restaurants (eg, taco and burrito bowl) a standard entrée was created from the available ingredients with four different protein options: all-plant based protein (vegan; that is, no animal products), lacto-ovo-vegetarian (ie, contains dairy or eggs but no meat products, including seafood), white meat (eg, poultry), and red meat (eg, beef). The caloric values for the ingredients included in these standard entrées were added together and entered into the data set for analysis.

Inclusion of Side Items with Entrées and Salad Dressings

Some entrées in the database indicated that side items or sauces were to be included with the meal. In cases where it was undetermined whether side items were typically included with an entrée, the database and restaurant website menu were consulted to determine whether a side item should be included in the calories for the entrée. For these restaurants, a random number generator was used to select a side item(s) to be included with all entrées requiring sides. Nutrition information for the entrée and combined items were calculated together.

The MenuStat database included salads with and without dressings, depending on how the individual restaurants provided nutrition information. Because salads are most often eaten with a dressing and dressing intake has been used as a proxy measure for salad intake, all salads were included with dressing.[19] For salads listed in the database without dressing included, the suggested paired dressing was manually added by researchers to the salad's nutrition information (eg, for McDonald's the Newman's Own Ranch dressing was included with the Bacon Ranch Salad). If the salad did not have a specified dressing, nutrition information for the restaurant's ranch dressing was included because