

## Short communication

## An observational study of consumer use of fast-food restaurant drive-through lanes: implications for menu labelling policy

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**Abstract**

*Objective:* Some versions of restaurant menu labelling legislation do not require energy information to be posted on menus for drive-through lanes. The present study was designed to quantify the number of customers who purchase fast food through drive-in windows as a means of informing legislative labelling efforts.

*Design:* This was an observational study.

*Setting:* The study took place at two McDonald's and Burger King restaurants, and single Dairy Queen, Kentucky Fried Chicken, Taco Bell and Wendy's restaurants.

*Subjects:* The number of customers entering the chain restaurants and purchasing food via the drive-through lane were recorded. A total of 3549 patrons were observed.

*Results:* The percentage of customers who made their purchases at drive-throughs was fifty-seven. The overall average (57%) is likely a conservative estimate because some fast-food restaurants have late-night hours when only the drive-throughs are open.

*Conclusions:* Since nearly six in ten customers purchase food via the drive-through lanes, menu labelling legislation should mandate the inclusion of menu labels on drive-through menu boards to maximise the impact of this public health intervention.

**Keywords**  
Menu labelling  
Energy labels  
Fast food  
Obesity

New York city, in a new tactic to fight obesity<sup>(1)</sup>, has required chain restaurants to post energy information on menus and menu boards<sup>(2)</sup>. Initial studies suggest that menu labelling can improve dietary choices when dining out<sup>(3,4)</sup> and has the potential to have a far-reaching public health impact on weight gain<sup>(5)</sup>. California has followed New York city's lead with the passage of Senate Bill 1420 which will have all restaurants with over twenty locations place the energy information of their food on in-store menu boards by 2011<sup>(6)</sup>. However, the California law does not require that energy labels be placed on the menu boards of drive-through lanes, but instead requires restaurants only to have a sign reading, 'Nutrition Information is Available Upon Request.' In an apparent attempt to forestall government intervention by arguing that industry is making good-faith efforts at self-regulation, YUM! Brands, the owner of Taco Bell, Kentucky Fried Chicken and Pizza Hut, announced plans to place energy labels on menu boards inside its restaurants, but menu labels will not be placed on the drive-through lane menu boards<sup>(7)</sup>. Given that a number of cities and states, and countries outside the United States, are considering various versions of menu labelling requirements, and that industry opposes providing point-of-pur-

chase information on drive-through menus, it is important to know how many consumers would be affected if drive-throughs are omitted from menu labelling policies. The current study aimed to assess how many restaurant patrons made their purchases at a drive-through lane window and would therefore fail to be exposed to required menu labels.

**Methods**

McDonald's, Burger King, Wendy's, Taco Bell, Kentucky Fried Chicken and Dairy Queen were chosen to be part of the present observational study since they are among the ten most successful fast-food restaurants based on sales. The total number of adults and children who entered each restaurant as well as the number of cars (and adults and children in them) who went through the drive-through were recorded during each observation period. Observations were conducted at two separate locations (one urban and one suburban) for both McDonald's and Burger King. The observational counts occurred at a McDonald's and Burger King in New Haven, CT, as well as a McDonald's and Burger King in a suburb of New Haven, CT. Observations were

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conducted at single suburban locations of Taco Bell, Wendy's and Kentucky Fried Chicken, and a Dairy Queen outside New Haven, CT.

A patron was counted as an inside-the-store customer if he or she entered the restaurant through one of the store entrances. Patrons were counted as drive-through customers if they were inside a motor vehicle that pulled up to the drive-through window. Every individual, including children, in each car was counted.

During the observations, research personnel sat in the restaurant in a place that allowed them to accurately count the number of individuals entering the store. In an effort to remain inconspicuous, observers purchased food and brought books while counting. Research personnel monitoring the number of patrons entering the drive-through lanes were stationed in a car near the lane so they could easily determine the number of individuals in each car proceeding to the drive-through. Given the high percentage agreement (95–100%) for the number of customers entering restaurants for a similarly designed study, we only had one observer perform each count<sup>(8)</sup>. The McDonald's and Burger King observations were performed for 1 h intervals during the following periods on both a weekday and weekend day: breakfast (07.00–09.00 hours), lunch (12.00–14.00 hours) and dinner (17.00–19.00 hours). Six observational intervals were completed at each of the McDonald's and Burger King locations. As breakfast was not offered at the other four restaurants, only lunch and dinner observations were performed. A total of four observation periods were conducted at each of these locations with the exception of Dairy Queen where only three observations were performed due to its closure during the winter season. A total of thirty-nine observations were performed.

## Results

Of the 3549 total patrons observed, 2006 (57%) made their purchases in the drive-through lane. The two Burger King locations had 65% and 55% of customers using the drive-through lane and the two McDonald's locations had 53% and 56% of customers using the drive-through lane. In all, 70% of Dairy Queen customers, 63% of Taco Bell customers and 62% of Wendy's customers observed used the drive-through lane. Altogether, 36% of the customers at Kentucky Fried Chicken were drive-through patrons.

## Discussion

Overall, more than half of all customers (57%) used the drive-through lanes of fast-food restaurants to make their purchase. Of the eight locations observed, all but Kentucky Fried Chicken had over half of the total customers using the drive-through lane. This number may also be an underestimate of drive-through use because some restaurants have late-night hours during which only the drive-through is

open and others cater heavily to people travelling in automobiles (e.g. restaurants at highway rest stops).

Because at least half of all people, and perhaps as many as six in ten who eat at fast-food restaurants would not be exposed to energy labels placed only on in-store menu boards, exempting drive-through menu boards would be expected to attenuate, if not greatly reduce the beneficial impact of menu labelling. Signs placed on drive-through menu boards stating that nutrition information is available would likely affect few customers. A study of consumers inside chain restaurants found that only 0.1% of customers looked at on-premise nutrition information available in pamphlets, posters, etc<sup>(8)</sup>. On the basis of our results, in order for menu labelling at chain restaurants to have a chance at directly impacting what people purchase, it must not only appear on menu boards inside restaurants, but also on the menu boards of drive-through lanes.

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