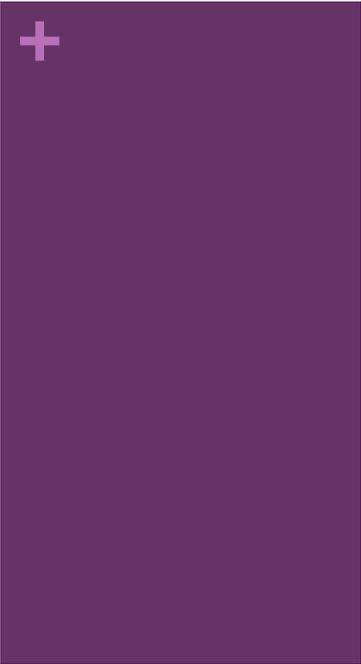


**Policy Recommendations:
Menu Labeling**

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- Dramatic changes in the availability, purchase, and consumption of foods away from home have taken place over the past thirty years, aligned with increasing rates of obesity

+ Changes in Food-Related Purchases

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- Americans are eating away from home more frequently.
Two different estimates:
 - Nearly 57% of Americans eat away from home on a given day (including childcare centers, schools)
 - In 1999–2000, 41% of US adults reported eating away-from-home foods at least weekly
- There are more restaurants (between 1972 and 1995):
 - 89% commercial eating places
 - 147% fast food restaurants

(USDA, 2000; Bowman, 2004, Virginia Foundation for Healthy Youth, 2010)

+ Eating at Fast Food Restaurants

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- 25% of adults and 30% of children 4–19 years old reported eating fast food at least daily
- In Virginia 73% of youth eat food from a fast food restaurant at least once a week

(Bowman, 2004, Virginia Foundation for Healthy Youth, 2010)

Link between Eating Away from Home, Diet Quality, and Health



Eating away from home is usually accompanied by eating more and choosing unhealthier foods



Foods Prepared Away from Home

- Between 1977-78 and 1994-96, Americans ate more food prepared away from home
 - Increase of 18% to 32% of total calories
- “Away” foods contain more:
 - Fat
 - Saturated fat
 - Cholesterol
 - Sodium
- “Away” foods contain less:
 - Dietary fiber
 - Calcium
 - Iron

(Guthrie, Lin, Frazao, 2002)

+ Children's Meals at Restaurants

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- Children's meals at all restaurants in a large Virginian town:
 - Meals ranged from **250 to 1937 calories**
 - Total fat 2.9 to 128.6 grams
 - Family-style meals were larger and offered more calories, fat than fast-food meal
- All fast food restaurants in Houston, Texas:
 - Average meal contained **526.7 calories**
 - Of the surveyed meals, only 37.4% met the USDA national school lunch guidelines for fat ($\leq 30\%$ of total energy)
- Of the top 20 fast food restaurants in the US:
 - Entrees ranged from 209 to 345 calories, 5.9 to 14.1 grams of fat
 - Side items 73 to 244 calories, 0.1 to 11.6 grams of fat

(Serrano and Jedda, 2009;
O'Donnell, Hoerr et al. 2008;
Serrano and Brosh, 2010)

+ Diet, Health, and Eating Away from Home

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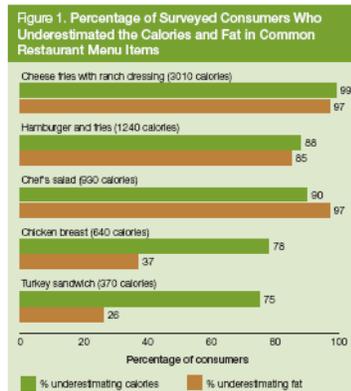
- Several studies have shown strong associations between frequency of eating away from home, particularly fast food restaurants, and:
 - total calories
 - fat
 - saturated fat
 - fruit and vegetables
 - milk
 - negative metabolic outcomes
 - weight status

(Lin 1999; Paeratakul, Ferdinand et al. 2003; Bowman, Gortmaker et al. 2004; Duffey, Gordon-Larsen et al. 2007 and 2009)

What are possible solutions?

- + Preparing and eating food at home (eating away from home less frequently)
- Choosing healthier options at restaurants
- ↕
- Offering healthier options at restaurants

+ Making Healthy Choices at Restaurants



Burton S, Creyer E, Kees J and Huggins K. "Attacking the obesity epidemic: the potential health benefits of providing nutrition information in restaurants." *American Journal of Public Health*. 96(9): 1669-1676, September 2006.

- Most consumers underestimate the amount of calories and fat in foods away from home, highlighting the importance of nutrition information on menus
- Most consumers WANT nutrition information

(Johnson, Corrigan et al. 1990; Burton, Creyer et al. 2006; Chandon 2007)

Labeling

- + In order to make healthier choices, it is important *to be informed* about the choices. History has demonstrated that transparency can lead to a multitude of changes

+ Food Package Labels

- When mandatory nutrition labeling for packaged foods was first implemented, between 1991 and 1995, numerous changes were noted:
 - number of available fat-modified cheese products tripled
 - Same phenomena as for trans fat labeling
- Three-quarters of American adults report using food labels on packaged foods

Nutrition Facts	
Serving Size 1 ounce Servings in bag 4	
Amount Per Serving	
Calories 155	Calories from Fat 90
	% Daily Value*
Total Fat 11g	0%
Saturated Fat 5g	0%
Trans Fat 0mg	0%
Cholesterol 0mg	0%
Sodium 148mg	5%
Total Carbohydrate 14g	5%
Dietary Fiber 1g	
Sugars 1g	
Protein 2g	
Vitamin A 0%	Vitamin C 9%
Calcium 1%	Iron 9%

*Percent Daily Values are based on a diet of other people's secrets. Your daily values may be higher or lower depending on your actual habits.

(Levy and Derby, 1996)

+ Restaurant Menu Labeling for Adults

- Inclusion of nutrition information on restaurant menus has been found to result in lower caloric and fat purchases, particularly among individuals who want to make healthier choices (i.e. limit calories)



	Calories
Hot Cakes	450
Hot Cakes	600
Big Breakfast	580
Deluxe Breakfast	660
Breakfast	560
	570

(Milich, Anderson et al. 1976; Cinciripini 1984; Dubbert, Johnson et al. 1984; Davis-Chervin D 1985; Mayer, Heins et al. 1986; Schmitz M 1986; Forster-Coull L 1988; Albright, Flora et al. 1990; Anderson J 1990; Balfour D 1996; Eldridge A 1997; Bassett, Dumanovsky et al. 2008; Driskell, Schake et al. 2008; Aaron J 1995; Fitch, et al., 2009; Harnack, French et al. 2008)



+ Restaurant Calorie Labeling for Children

- In one study, parents of children 3 to 6 years of age were randomized to receive a McDonald's menu with or without nutrition information
- Parents who received nutrition labeling on menus averaged **102 fewer calories** for their children



(Tandon, Wright et al., 2010).



Current National Legislation



Restaurant establishments with 20 or more locations nationwide post “the number of calories contained in the standard menu item, as usually prepared and offered for sale” “in a clear and conspicuous manner,” and with “a succinct statement concerning suggested daily caloric intake.”

The bill goes into effect January 1, 2011.

(US House of Representatives, 2010)

+ Conclusions

- More people are eating away from home
- Foods available away from home are generally larger and have more calories, fat, and saturated fat than meals prepared at home
- Frequency of eating away from home is associated with diet quality and weight status
- Nutrition labeling and point-of-purchase materials have demonstrated success in improving food-related purchases at participating restaurants and at food outlets

+ Policy Recommendations

1. Require restaurants with 5-19 locations to post calorie information (consistent with national mandate for 20+ locations)
 - a) Recipes that do not change day-to-day
 - b) All restaurants that use standardized menus, often including children's menus