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Calorie Labeling on Menus and Menu Boards--Reply

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In Reply We share the concerns of Ms Sarink and colleagues that calorie menu labelling may have a more positive effect among individuals with higher incomes. We agree that research on menu labeling should investigate the possibility of disparate responses by income.

However, these concerns remain theoretical. Prior studies of calorie labeling, including those cited by Sarink et al, have not demonstrated a clear link between income and response to labeling. For example, Bollinger et al¹ found a greater decline in calories per transaction postlabeling in Starbucks restaurants located in higher- vs lower-income zip codes. However, they did not have individual-level income data.

In stratified analyses in the study by Krieger et al,² calorie labeling was associated with a decline in fast-food meal calories purchased in census tracts that were both low-income and diverse but not in other tracts. However, the differences-indifferences analyses directly comparing tracts that were low income and diverse with other tracts found no significant differences prelabeling vs postlabeling by type of tract. They also did not have individual-level income data.

Even if menu labeling leads to differential response by income, the income disparity in fast-food consumption may blunt some of this effect. Using data from the 2007-2010 National Health and Nutrition Examination Surveys, Fryar and Ervin³ reported that low-income young adults aged 20 to 39 years consumed more calories from fast food (16.6% of all calories consumed) than those with a higher income (13.8%). No difference by income was evident for older adults.

Even if low-income individuals respond less to calorie labeling, they may be exposed to it more frequently and have more opportunity to see and use this information. However, this potential effect may be isolated to young adults, who consume the most fast food and are the only age group with differential consumption by income.

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As we described in our Viewpoint, restaurants appear to be responding to labeling by decreasing the calorie content of items.⁴ A recent study of 66 chain restaurant menus found that new items introduced in 2013 had 56 fewer calories (on average) compared with items offered in 2012 that were no longer on the menu in 2013.⁵ Because the federal calorie labeling law has still not been implemented, these changes cannot be clearly linked to calorie labeling but could be a development in anticipation of labeling.

If this trend expands after labeling, this effect might lead to greater reductions in fast-food calories than the changes that customers make in response to labeling. All fast-food restaurant customers likely would eat fewer calories as a result of default changes in calorie content, regardless of their individual characteristics.

As we stated, calorie labeling is a first step that should be accompanied by broad policy change to encourage lower calorie consumption. We agree with Sarink et al that if evidence emerges to suggest disparities in response by income or overall ineffectiveness of menu labeling, other complementary strategies should be considered.

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