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Perspective

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Improving Obesity Prevention at the Local Level — Emerging Opportunities

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Thanks to a coalescence of available scientific evidence and new regulatory possibilities, there is currently substantial opportunity for local innovation in addressing the public health problem of obesity.

One promising example stems from a recent federal obesity-prevention initiative: the menu-labeling provisions of the Affordable Care Act (ACA), which require chain restaurants operating 20 or more locations to provide calorie information on their menus and menu boards, along with a statement addressing daily recommended caloric intake.

Despite widespread agreement in the scientific community that obesity is driven by environmental factors, the ACA's menu-labeling provision is one of the first federal efforts to target a known environmental risk factor — consumption of food away from home, which is typically higher in calories and fat. Proponents of menu labeling offer two primary arguments in its favor: it may lead people to purchase foods with fewer calories, and its imposition may lead restaurants to reformulate higher-calorie menu items and develop more healthful offerings. Opponents often point to weak or inconsistent evidence regarding the effect of menu labeling on consumers' purchasing behavior. They also express concern about the implementation of labeling for menu items that change frequently (e.g., seasonal items) or contain a range of calories.

Aside from variation in study methods and data quality, a key reason for equivocal findings in studies of menu labeling may be related to the way calorie information is communicated. In jurisdictions that mandated menu labeling in restaurants before the passage of the ACA, calorie information is usually presented in terms of absolute calories (e.g., a hamburger has 250 calories). If customers don't understand what 250 calories means or how those calories fit into their overall daily dietary requirements, posting that information on a menu may not be very useful. That difficulty may apply particularly to minority populations and those with low socioeconomic status, who are at highest risk for obesity and tend to have lower-than-average levels of nutritional literacy and numeracy,[1] which may make it difficult for them to translate the infor-

mation into interpretable equivalents. An additional concern regarding interpretation arises in the case of foods (including combination meals) with a calorie content that would be displayed as a range (e.g., 400 to 700 calories for a slice of pizza, depending on the toppings). Even with the ACA's required statement about daily recommended caloric intake, calorie ranges may be challenging to interpret if consumers don't know the number of calories in the components.

As the Food and Drug Administration (FDA) finalizes the federal menu-labeling regulations, which will include specific requirements for how calorie information is presented on menus and menu boards, it's important to consider the opportunities that remain for states and localities. Local governments are well positioned to augment the potential effectiveness of the ACA's menu-labeling provisions, in part because they have already begun engaging in innovative regulatory activity related to obesity prevention (e.g., pre-ACA local menu-labeling laws) and will continue to do so.

There is robust scientific support for various alternative strategies for presenting calorie information to consumers, all of which are probably superior to listing absolute calories. One strategy is to make calorie information more easily understandable, since information-based interventions that require less mental processing are generally more successful than those requiring greater computational effort. For example, presenting consumers with calorie information in the form of a physical-activity equivalent (e.g., minutes of running required to burn off a particular food) is more effective than the presentation of absolute calories in changing purchasing behavior[2] and in reducing the total number of calories ordered.[3] Another alternative is changing the default options — for example, replacing the default fries and soda in a child's meal with apple slices and low-fat milk. Such a change has been implemented at Disney theme parks, where the default beverages for children's meals are 100% juice, milk, and low-fat milk and the default side dishes are fresh fruits and vegetables. Empirical research has shown that changing the default by listing healthful choices on the front page of a menu is significantly associated with the purchase of lower-calorie sandwiches, whereas putting calorie information on a menu is not.[4]

Simple and relatively inexpensive modifications, such as changing either the mode of communicating calorie information or the default choice (or, ideally, both approaches used in a complementary fashion), may have a considerable effect on consumer behavior. Most purchasing decisions are made quickly and automatically without substantial cognitive input. In addition, choices of foods that are high in fat and sugar are typically made more quickly than healthful food choices — a finding that argues for making it as easy as possible to choose the most healthful options.

Although the ACA's menu-labeling provisions apply only to restaurants with 20 or more locations, restaurants with fewer locations can elect to be subject to these requirements by registering with the federal government. State and local governments are preempted from imposing their own menu-labeling requirements on restaurants that elect or are required to comply with the ACA's provisions. State and local governments may, however, impose menu-labeling requirements identical to the ACA's, which would allow them to enforce the ACA provisions. In addition, in its proposed menu-labeling rule, the FDA emphasizes that state and local governments can enact their own menu-labeling requirements for restaurants that do not fall within the ACA's purview (i.e., restaurants with fewer than 20 locations that have not opted in to the ACA requirements). Because it is estimated that the ACA provisions will affect less than half of U.S. restaurants — and restaurants with fewer than 20 locations will not

necessarily volunteer to comply — state and local menu-labeling regulations remain important.[5]

State and local governments now have a substantial opportunity to craft innovative menu-labeling regulations that build on the current evidence base. For example, a city or town could pass a menu-labeling ordinance requiring restaurants to list their food options starting with their lowest-calorie items. Such a rearrangement may help consumers to select more healthful and lower-calorie foods. Localities might also require restaurants to post calorie information in the form of physical-activity equivalents along with or instead of absolute calories. State and local governments that are hesitant to pass menu-labeling legislation might begin by encouraging voluntary participation in these and other innovative alternatives.

Despite the regulatory opportunity provided by the ACA, state and local governments must remain mindful of the broader legal environment as they draft menu-labeling regulations. A handful of states (e.g., Georgia and Utah) have enacted laws that prohibit localities from imposing such regulations; such laws may be passed for a variety of reasons, including as a response to local menu-labeling initiatives. The restaurant industry has argued that such preemptive laws protect restaurants from facing the costs of compliance with a patchwork of potentially inconsistent local regulations. As they anticipate such concerns, localities should be mindful of the costs associated with menu labeling and — to encourage participation in innovative programs — perhaps provide financial support or technical assistance for restaurants' calculating of nutritional content and reprinting of menus and menu boards. State and local governments should also consider the scope of the First Amendment, which protects commercial speech and may limit the language that can be mandated in menu-labeling regulations.

Pilot studies will be needed to test novel approaches, but the emerging evidence base indicates that innovative calorie labeling on menus has the potential to be more effective than the status quo. Local governments should take advantage of this opportunity. The success of menu labeling will depend greatly on its implementation, ideally at the federal, state, and local levels.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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Limiting "Sugary Drinks" to Reduce Obesity — Who Decides?

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When a judge struck down the New York City Board of Health's partial ban on selling "sugary drinks" in containers of more than 16 fluid ounces, the reaction was swift. The Portion Cap Rule was widely viewed as a signature accomplishment of Mayor Michael Bloomberg's third term as the "public health mayor," and he vowed to appeal, saying, "I've got to defend my children, and yours, and do what's right to save lives. Obesity kills."[1] But the question before the judge was not about the health risks posed by obesity or even the relationship between obesity and access to large cups of sugary drinks; it was whether the city's Board of Health (part of the New York City Department of Health and Mental Hygiene) had the legal authority to restrict the serving size of such drinks.

Written in the mayor's office, the Portion Cap Rule was adopted by the board on an 8-to-0 vote with one abstention in September 2012 and was almost immediately challenged in court. Judge Milton A. Tingling heard the case and wrote a 36-page opinion striking down the rule.[2] There was no dispute that obesity is a serious problem; the only issue considered by the judge was whether the board has the power to adopt the rule. The substance of the