# AJPH EDITORIALS

# Front-of-Pack Nutrition Labels and Point-of-Decision Strategies to Improve Food Choice Quality

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The prevalence of overweight and obesity has increased throughout the world over the past 40 to 50 years, leading to a marked rise in the disease burden related to high body mass index.<sup>1</sup> Efforts by public health officials and policymakers, including 25 years of mandatory nutritional labeling for packaged food products in the United States (Nutrition Labeling and Education Act, 21 USC 301 [1990]), have not slowed or reversed the trend of rising overweight and obesity.

Recently, front-of-pack nutrition labels, which provide easily accessible information and guidance about key nutritional attributes, have generated interest among policymakers and private industry as a way to address unhealthy diets, resulting in myriad label options, which may perform differently depending on attributes of the label. Already, multiple governments-including in Singapore, the United Kingdom, and France-have given official recognition to one front-of-pack label (which differs in each country), although use of the label is voluntary.

Before other countries officially recognize a particular frontof-pack label, policymakers should consider evidence about the efficacy of different labels. Some research aiming to understand variation in consumer response to different front-ofpack labels has been conducted. For instance, in a multinational study of consumers, Feunekes et al.<sup>2</sup> examined response to different labels-how understandable, credible, and likeable labels were-and how they affected respondents' intention to use them. Crosetto et al.<sup>3</sup> evaluated differences in the effectiveness of two front-of-pack labels in a study in which participants were incentivized to build a healthy menu, finding that the efficacy of the labels varied depending on the number of nutritional attributes the participants had to consider and whether the participants faced time pressure. Both of these studies stopped short of investigating choice based on consumers' preferences, and both were limited in their geographic scope.

# STUDY STRENGTHS AND WEAKNESSES

In this issue of *AJPH*, Talati et al. (p. 1770) report on a large-scale study that examined changes in hypothetical food choices in response to five different front-of-pack labels among more than 12 000 individuals who fulfilled demographic targets for age, gender, and income level across 12 geographically and culturally diverse countries and who completed an online survey. Testing different front-of-pack labels in a single population likely requires sacrificing certain research design ideals that would yield the greatest external validity. An ideal test of front-of-pack labels would include real-world implementation in grocery stores with a control condition, appropriate randomization of participants to conditions, and observations of nonhypothetical choices in each condition. However, the levels of funding and access to cooperative private retailers that would be needed to simultaneously test multiple front-of-pack labels in the field are infeasible in most cases, particularly for multinational studies.

In the face of these limitations, Talati et al. do an admirable job of designing a study to compare consumer response to common front-of-pack label styles across a range of countries. Two of their study design choices bear noting because they are arguably not the most conservative choices the authors could have made and may have overstated the effect of the labels; the authors note these as limitations, but they should not influence the estimated relative efficacy of labels. First, the products used in the research were from a hypothetical brand, eliminating the real-world challenge to label efficacy that research participants' habits, product preferences, and brand loyalty pose. Second, participants made choices twice for the same three sets of three hypothetical products-first without frontof-pack labels present and subsequently with labels displayed on the products. Although it provides greater statistical control to the researchers and vields evidence about participants' underlying food preferences, this second design choice may have disclosed to participants the point of the research, which could have engendered a researcher demand effect. Even more importantly, it may have prompted participants to think about their health, potentially making health attributes more salient in the second round of choices than in the first.

Despite these concerns, Talati et al. provide an important contribution to the literature by identifying which front-of-pack labels are most effective at shifting food choices toward healthier items in a large sample of consumers in diverse countries. In summarizing their findings,

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Talati et al. state that "welldesigned, salient, and intuitive front-of-package labels can be effective on a global scale. Their impact is not bound to the country from which they originate" (p. 1770). However, if the goal of front-of-pack labels is to reduce obesity, then other points must be considered. When the authors examine the data disaggregated by country, the ranking of label efficacy is far less clear. They note a significant response to labels among consumers in countries in which specific labels originated, which they attribute to familiarity. An alternative explanation is that the design of those labels may include some element that enhances the effectiveness of those labels for that population.

## FURTHER CONSIDERATIONS

To address negative health outcomes related to overweight and obesity, it is important to consider the needs of individuals at high risk for these conditions. Ideally, the development of front-of-pack labels would seek to identify the labels that most inspire behavior change in high-risk populations. Looking at average effects within multiple, pooled populations may identify behavior changes by individuals

who already make relatively healthy choices. As an example, in unpublished research conducted to inform the development of a healthy food label in collaboration with the Rosebud Sioux Tribe-a population with high rates of obesity across the life span-we examined the effect of front-of-pack labels tailored to the local community on healthy food choices relative to a generic label tested among the general population in multiple countries.<sup>2</sup> The tailored label featured imagery and text highlighting the origin of the label within the community, which may have communicated injunctive social norms about healthy eating. Although the generic label significantly increased the likelihood that a participant chose a healthier item relative to a no-label control condition in a choice experiment with supermarket shoppers, the targeted label proved even more effective.

Front-of-pack labels can help consumers to easily identify healthier options. However, it is important to consider additional tools to address overweight and obesity. A frequent finding in studies of nutrition information is that many consumers report not observing information, and only a small fraction of those who notice it report using it.<sup>4</sup> Even people motivated to lose weight through dieting appear to lose track of long-term goals; however, goal-oriented prompts may refocus attention,<sup>5</sup> even among nondieters.<sup>6</sup>

A field study hints at the value of strategies that complement front-of-pack labeling with goal-oriented prompts. After refinement and implementation of the community-led labeling system in a supermarket on the Rosebud Reservation, we conducted a study on goal-oriented point-of-decision prompts.7 Despite the presence of nutrition facts panels and the tailored labels in the no-prompt control condition, a point-of-decision prompt encouraging shoppers to aim to purchase a target number of healthy foods resulted in a significantly higher proportion of healthy foods purchased than in the control condition. Frontof-pack labels do help identify healthier foods, which is particularly valuable when people's knowledge about nutrition is low; however, it may be even more effective to pair accessible, easy-to-interpret labels with techniques that prompt individuals to actively consider their health when choosing foods. To address the obesity epidemic through changes in food consumption, we need to consider all available strategies to not only help consumers identify healthier choices but also help maintain a focus on long-term health. AJPH Christopher R. Gustafson, PhD

### **CONFLICTS OF INTEREST**

The author has no conflicts of interest to disclose.

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