Numeric and Traffic Light Calorie Labels on Cafeteria Menus: Noticing, Use, and Perceptions Among Young Adults

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Objectives: The objective of this study was to examine the impact of numeric versus interpretive calorie labelling on consumer noticing, use, and perceptions of labels. We hypothesized that due to their at-a-glance format, interpretive labels would outperform numeric labels.

Methods: Using a pre-post quasi-experimental controlled trial design, three campus cafeterias were randomized to receive numeric calorie labelling, traffic light labelling (i.e., red, amber, or green symbol indicating the number of calories), or no labelling for two weeks. Exit surveys were conducted with cafeteria patrons prior to (n = 949) and following (n = 1110) implementation of labels. Surveys queried sociodemographic characteristics, the details of the most recent cafeteria purchase, and noticing, use, and perceptions of labels. Chi-squared tests and multinomial logistic regression were used to determine the impact of format on label noticing, use, and perceptions.

Results: Label noticing increased from 23% to 43% among those exposed to numeric labels and 28% to 63% among those exposed to traffic light labels, compared to no change in the control (15%) (P < 0.05). Among those who noticed labels, a higher proportion (66%) of those in the traffic light condition reported using the labels to inform their purchase compared to the numeric (50%) and control (50%) conditions (P < 0.05). Scores for perceived ease of use and understanding of the labels were high at both labelling sites. Compared to the pre-test period, there was a slight increase (6%) in the proportion of people who indicated traffic light labels were easy to use and understand versus no change in perceptions at the numeric and control sites (P > 0.05).

Conclusions: Cafeteria patrons exposed to calorie labels reported noticing and using them, with higher salience for traffic light labels. The implementation of such interpretive labels at the point-of-purchase may provide cues to enable consumers to make informed choices, consistent with front-of-pack labels on packaged foods under consideration in many jurisdictions.

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