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### Cost-effectiveness of the Victorian sugary drink public education mass media campaign: a modelled analysis

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**Introduction:** Globally, there are no published cost-effectiveness data available on public education mass media campaigns designed to reduce the consumption of sugar-sweetened beverages (SSB). This analysis evaluated the costs and benefits of the 2015 Victorian 'Live Lighter' campaign which promoted reduced SSB consumption.

**Methods:** A Markov cohort model predicts the lifetime projected costs and benefits of reducing bodyweight and body mass index (BMI) through changes in SSB consumption in 2010 Victorian adults. Self-reported changes in SSB consumption calculated from survey data collected in a rigorous, controlled, cohort study were used to estimate changes in mean population energy intake and BMI and the incidence, prevalence, mortality, morbidity and healthcare-related costs of nine obesity-related diseases. The economic evaluation, conducted from a funder perspective, provides estimates of the incremental costs (campaign, hospital services, out-of-hospital medical services, pharmaceuticals, health professionals), outcomes (life years gained; health-adjusted life years (HALYs) gained), and cost-effectiveness (incremental cost per HALY gained) of exposure to the campaign versus usual activities. The results are presented in 2010 reference year values (3% discount rate).

**Results:** A three year campaign, costing approximately \$9.8 M (\$9.1 M; \$10.5 M), results in mean change in body weight of 0.4 kg. Modelled over the lifetime, this produces savings of \$51.4 M in healthcare costs (\$44.6 M; \$58.0 M) and 4,540 (3,938; 5,298) HALYs saved. The campaign is predicted to save 2,744 years of life (2,549; 2,951), and prevent 1,982 (1,506; 2,501) new cases of obesity-related diseases over the lifetime of the population.

**Conclusion & recommendation:** The findings suggest the 2015 Victorian 'Live Lighter' campaign improves health and saves money in the long term with every dollar invested in the campaign estimated to return \$5.22 in healthcare cost savings. These results support greater investment in this public health strategy as part of broader obesity prevention efforts.

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### Can front-of-pack nutrition labels overcome any biasing effects of nutrient and health claims?

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Most nutrition labelling research examines the influence of various forms of nutrition labelling in isolation. However, consumers make food choice decisions in environments featuring numerous forms of informational stimuli that can be inconsistent in their messaging. Two forms of nutrition information that often appear together on the front of food packages are front-of-pack labels (FoPLs) and health claims. There is the potential for these different forms of nutrition information to provide contradictory information, which can confuse consumers and result in compromised purchase decisions. To date, there has been limited research to guide policy makers in their regulatory decisions relating to the co-existence of FoPLs and HCs on food packages. The present study addressed this gap by administering a discrete choice experiment to 2,069 Australians aged 10+ years (equal gender split and an intentional skew towards respondents of lower socioeconomic status). Survey respondents were exposed to various combinations of FoPLs (Health Star Rating, Daily Intake Guide, Multiple Traffic Lights) and health claims (nutrient, general, and higher level) on products from four different food categories (cereal, yoghurt, pizza, and cookies) that each had unhealthy, moderately healthy, and healthy variations. Overall, the presence of a FoPL alone was best able to improve the healthiness of choices relative to when a health claim was present on-pack (with or without a FoPL). Of the three FOPLs tested, the Health Star Rating was especially effective in improving the healthiness of choices when used in isolation and/or when used in combination with a health claim. The results highlight the importance of providing governments with information relating to the effectiveness of different FoPLs when used in conjunction with other forms of nutrition information to assist them to (i) select the most appropriate FoPLs for wide-scale use and (ii) regulate the use of health claims.

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