Cost-Effectiveness of Product Reformulation in Response to the Health Star Rating Food Labelling System in Australia

The prevalence of obesity has been growing globally, mainly as a consequence of obesogenic food environments. As a consequence, a number of initiatives and interventions are being assessed to help consumers make healthier, informed choices. Due to its ability to provide immediate summary nutrient information, front-of-pack nutrition labelling is an initiative that is gaining momentum. Implemented since 2014, the Health Star Rating system is “a voluntary front-of-pack labelling initiative endorsed by the Australian government.” The aim of this study was to examine “the long-term health impacts and cost-effectiveness of the reformulation of energy density in Australian pre-packaged foods and beverages attributable to the Health Star Rating system.” Furthermore, the study also estimated subsequent changes in weight and the prevalence of obesity-related diseases across the Australian Population and assessed the impact of the HSR system from a supply-side perspective to estimate how changes in the food environment might impact weight.

The pre-packaged food products available in both 2013 and 2016 showed that 6.7% of products implemented the Health Star Rating label. The main outcomes were long-term health impacts and cost-effectiveness of the reformulation of energy density expressed in health adjusted life years, net costs, and incremental cost-effectiveness ratios. Furthermore, the results suggest that “small changes in the average energy intake of the population can potentially reduce population levels of obesity and, in turn, the burden of obesity-related diseases.” Overall, the findings suggest that the Health Star Rating system is likely to be cost-effective. This study provides evidence-based information that can assist policymakers to make informed decisions about future Front-of-Pack Labelling initiatives to target obesity and modify the food environment.