

00326 **Within-category Versus Across-category Lower-calorie Labelling on Food Demand: a Crossover Trial (LoCal)**

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Aims: To tackle rising rates of obesity and chronic diseases, the Singapore Health Promotion Board labels foods/drinks as “healthier” by comparing products within categories (e.g. within dairy drinks). A competing approach, such as UK’s Traffic Light System, labels options as healthier by comparing across all products. This study aims to test whether a within or between category approach has a greater influence on purchasing patterns and diet quality. We hypothesized that the within-category labelling strategy would have a greater influence on food purchasing patterns and diet quality than the between category approach, but that both would outperform a no labelling strategy. We test these hypotheses using a ‘Lower Calories’ label developed by the research team.

Methodology: This randomized controlled trial followed a 3x3 crossover design, with 146 participants exposed to three shopping conditions in random order via an on-line grocery store. Groceries were actually purchased and delivered to participants’ homes. The three conditions (arms) were: Arm 1) no logo labelling, Arm 2) within-category labels, and Arm 3) across-category labels. Arm 2 displayed the customized label on the 20% of products within each product category with the lowest calories per serving. Arm 3 displayed the label on the 20% of products across all categories with the lowest calories per serving. The proportion of labelled products purchased (primary outcome) and all secondary measures of diet quality were calculated using participants’ orders.

Result: The proportion of ‘Lower Calories’ products purchased was 10.6 percentage points lower in the across-category arm compared to the control arm ($P < 0.01$) and 13.5 percentage points lower compared to the within-category arm ($P < 0.01$).

Conclusion: Results indicate that within-category lower calorie labels are more effective at influencing food purchasing patterns than across-category labels. This lends support to the Healthier Choice Symbol labelling strategy as currently applied.