Healthy Eating Interventions That Work

Mutually beneficial solutions for the food industry, health and the environment.

The global food industry is a US$2.5 trillion behemoth that contributes to the twin pandemics of obesity and climate change through its impact on what, when and how much we eat. A special issue of the Journal of the Association for Consumer Research contributes new insights to our understanding of effective ways to promote healthy eating that could be adopted by food marketers.

Examining this topic through a broad lens, the special issue focuses on interventions conducted in the field rather than lab-based studies, as there is often a large gap between what people self-report about their eating choices and their actual behaviour.

Most of the studies in this special issue that we co-edited expand on healthy eating interventions that can be mutually beneficial for business, consumers and public health. This win on multiple fronts is key, as it is unlikely that we
can create meaningful and sustained improvements without getting the food industry – the ones producing, distributing and cooking our food – on board.

Covering topics ranging from the effectiveness of nudges to food-logging apps, these papers reflect on what healthy eating means through the lens of consumers’ perceptions, increase our understanding of the methods used to test healthy eating interventions and examine whether and when various interventions effectively lead to healthier eating.

**Healthier eating through pro-environmental nudges**

Attempts to persuade people to make healthier eating choices often focus on health and nutritional benefits. But these factors are not actually major motivators, especially for those who have problems with weight and obesity. In fact, nutritional labelling is most effective for health-oriented consumers who already make a habit of reading food labels.

In “Increasing the Selection of Low-Carbon-Footprint Entrées Through the Addition of New Menu Items and a Social Marketing Campaign in University Dining”, Hannah Malan and her co-authors discovered that emphasising the effect of food selection on climate change can help foster healthy eating choices. In their field study conducted at a university dining hall, low-carbon footprint dishes were promoted to students through new plant-based menu items and a social marketing campaign.

The researchers saw a significant increase in the proportion of low-carbon footprint entrée sales from 13.9 percent to 21.4 percent following the intervention. These results suggest that promoting the climate benefits of tasty plant-based meat alternatives can shift food-choice patterns in a university towards generally healthier options.

This study makes a case for finding roundabout ways or implementing “stealth” health interventions – which go beyond emphasising calories or nutritional benefits – to motivate people to make healthier choices. Beyond focusing on the environment, other roundabout ways to motivate healthier choices could include promoting animal welfare or highlighting the importance of food security.

**Healthier eating through social influence**

Amid growing obesity concerns, certain establishments have taken to adding calorie information to their menus. Many states in the United States have
even introduced **mandatory calorie-posting laws** for restaurants. But given that results on the effectiveness of calorie posting on lowering total meal calories **have been mixed**, it is important to understand the conditions under which calorie posting will lead to reduced caloric consumption.

**Melis Ceylan, Nilüfer Aydinoğlu** and **Vicki Morwitz** found in “**Embarrassed by Calories: Joint Effect of Calorie Posting and Social Context**” that calorie posting is more effective in lowering the total calorie content of orders when food is ordered in the company of others. This improved effectiveness of calorie labelling occurs because ordering an indulgent, high-calorie meal in this specific dining setting adversely affects the image consumers want to project and leads to feelings of anticipated embarrassment that prompt lower-calorie meal choices.

Their paper suggests that calorie posting can be more beneficial in a social context – an important and practical insight for policy makers. There is a need for alternative ways to increase consumers’ motivations to select lower-calorie meals when they order food alone – such as via delivery apps – or with those with whom they are not worried about having to project a certain image.

One potential way to increase the effectiveness of calorie posting even when people are ordering and eating alone is to leverage gamified restaurant apps that let consumers gain more rewards by ordering lower-calorie meals. Presenting lower-calorie items with hashtags on these apps might encourage individuals to share this information on social media and increase the perceived social nature of the dining experience.

**Healthier eating through size-based nudges**

In another article, “**Misunderstood Menu Metrics: Side-Length Food Sizing Leads to Quantity Underestimation and Overeating**”, **Thomas Allard** and **Stefano Puntoni** found consumers are often unable to accurately gauge the quantity of food when basing their estimations on side-length metrics (e.g., a 12-inch pizza). Such measurements are ubiquitous in food-marketing promotions and on menus.

The researchers conducted a series of experiments that show that describing food using side-length metrics leads to food-quantity underestimation and subsequent food intake misaligned with consumers’ objectives.
For example, participants believed that one nine-inch pizza was less food than two six-inch pizzas, when the former is actually 13 percent more food. This underestimation occurs because people do not adequately adjust for the exponential difference in the surface area associated with linear changes in side-length metrics.

Instead of using side-length information, the research proposes adopting metrics such as surface area and serving amounts on menus as interventions to nudge consumers towards better food-consumption decisions without relying on complex training interventions. This is a great example of a win-win situation: It empowers consumers to make more informed choices aligned with their goals and reduces the likelihood of food waste or overeating, while companies can charge more for smaller food portions.

**Healthier eating through habit-forming nudges**

Ultimately, healthy eating choices, like other health-related decisions, only work if the behaviour is repeated. It is therefore crucial for policy makers and companies to nurture habit-forming behaviour. Besides removing frictions to adoption, they should emphasise the positive effect of healthy eating in the present instead of dwelling on future benefits. Timing also matters, as it can be easier for people to adopt new habits when they are taken out of their comfort zone or begin a new chapter in their lives.

Health-geared apps can harness fun gamification strategies – such as streaks – or financial incentives to provide people with immediate rewards for making healthier choices. Implementing a social element, so that consumers feel a sense of external pressure, can also help. As an example, an INSEAD case study written by Pierre Chandon and Shilaan Alzahawi shows how the Carrot Rewards app helped provincial governments in Canada make their citizens significantly more active by rewarding them for walking or taking gamified knowledge quizzes with points from their favourite loyalty programmes.

This special issue emphasises that there are many ways people define healthy eating and multiple ways to encourage healthy food choices: from interventions that target cognition by supplying consumers with information, to those that appeal to their emotions or directly change behaviour.

Targeted interventions that don’t merely address what we eat, but also how much, where and when can be the most effective in nurturing healthy eating habits that benefit business, consumers and public health.
Find article at
https://knowledge.insead.edu/marketing/healthy-eating-interventions-work

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About the research

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