

Impact Objectives

- Investigate the efficacy of consumers' motivational and volitional self-regulatory processes in promoting healthier meal choices
- Provide a more enlightened and holistic understanding of the self-regulation of eating behaviour across different food consumption stages and settings
- Contribute to the design of social marketing messages and public health policies that promote healthy eating and help fight the obesity epidemic

The science behind healthy lifestyle choices

Drs Ana Isabel Costa, Cláudia Simão and Rita Coelho do Vale offer their thoughts on the ways in which research can help change shopping and eating habits and promote healthier lifestyles



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What are some of the key gaps in terms of our understanding of the global obesity epidemic?

AC: Most research investigating the drivers of obesity at the individual level focuses on the intake of single, “bad” versus “good”, foods in de-contextualised, unrealistic study settings; meaning, many important consumption decisions made prior to ingestion are disregarded. Most foods are not eaten in isolation, but rather in the highly complex contexts of domestic or away-from-home meals. We know a lot about how taste, appearance, package size, price and other food product characteristics may lead people to overeat; we also know much about the characteristics of individuals that become obese. However, we know relatively very little about how people make routine (and often unconscious) food-related decisions in the context of their everyday meals that help them control what they eat. PRIMEMEAL takes a transformative consumer research perspective to investigate the efficacy of consumers' motivational and volitional self-regulatory responses in promoting healthy meal choices. This project studies novel, psychological self-regulatory processes and tools, like the activation of personal norms about home cooking through social

marketing messages, or the smart design of meal plans, grocery shopping lists and restaurant menus. Ultimately, its purpose is to contribute to the design of public policies that stimulate healthy eating habits and help fight the obesity epidemic.

What is the ultimate impact of this work?

AC: Our findings show that supplying information about the broader benefits of home cooking can effectively stimulate domestic meal preparation and detract from unhealthy eating habits by activating personal norms. This knowledge can more effectively guide the implementation of nutritionists and dietitians instructions or be embedded in the design of mobile apps and other online tools. Meanwhile, our studies on menu design show how the presentation of meal choices and nutrition information to consumers affects their decision-making processes. This knowledge is useful for the design of, “smart” menus that promote healthier choices and other “nudges” that promote healthy eating in general.

PRIMEMEAL uses field, laboratory and online studies to deliver the research. Why is it necessary to use all three?

CS: Field studies are conducted within the consumer's context. They show how people behave when they are in their natural shopping and eating environments. They generate unique and invaluable “big-picture” insights on food choices, but they are often complex and costly to develop, since many potential confounds need to be controlled. Laboratory studies, therefore, complement field studies, because we can control for more variables, making them less susceptible to confounders than the field studies. Here, we randomly assign who is exposed and who is not to a particular experimental treatment, enabling an easy and accurate determination of the causes of consumers' responses to different situations. Online experimental studies complement laboratory studies because we can test the same ideas in a wider sample of subjects, differing by age, nationality, food habits, etc.

What type of consumer research is conducted at the Laboratory for Experimental Research in Economics and Management (LERNE)?

RCV: LERNE supports the performance of experimental research on consumer behaviour in the broadest sense. To this end, it entails two infrastructures: a Research Lab, for the computer-assisted collection of individual and psychological data in controlled settings; and a Retail Lab, consisting of a mock retail area dedicated to the collection of data on purchase behaviours in more realistic store settings.



How science improves eating decisions

The PRIMEMEAL consortium is working to understand the personal and environmental factors that will help individuals commit to living a healthier lifestyle

The rates of obesity in our society have continued to rise, despite what seems like a never ending flood of health, nutrition and diet advice, from the media and online. Why are more and more people struggling to make healthy choices in light of the seemingly multitudes of information available? One team of researchers is setting out to investigate this issue and show that many complex factors involving consumer psychology, marketing and public health policies are involved.

According to the PRIMEMEAL project, the numbers of obese and overweight individuals has risen from 857 million to 2.1 billion since 1980. Dr Ana Isabel de Almeida Costa, lead researcher at PRIMEMEAL, believes the failure of individuals to control their food intake amidst what she calls a growing 'obseogenic' environment – one where ever more 'highly caloric, palatable and affordable foods are readily available at any place and time' - points to 'the importance of strengthening the self-regulatory power of individuals striving to eat healthier.' It is to this aim that PRIMEMEAL was proposed and funded. It is an effort to investigate the 'efficacy of consumers' motivational and volitional self-regulatory processes in promoting healthier meal choices' explains Costa, and to use this information for the 'design of social marketing messages and public health policies to help fight the obesity epidemic.'

FACTORS BEHIND CONSUMER DECISIONS

PRIMEMEAL specifically targets three

areas of self-regulation, relative to each consumer's choices and health goals: motivational, volitional and involuntary self-regulatory responses. These can be thought of in terms of increasing and preserving the will power needed to overcome internal and external cues, so one can behave according to long term goals.

Motivational responses, such as goal setting, are the reasons behind a person's actions and are aimed at increasing will power. Volitional responses, known as goal striving, are when an individual decides or commits to a course of action; this preserves will power, along with nudging or involuntary responses. Nudging is best understood as the 'circumstances under which involuntary self-regulatory responses are more successful than motivational or volitional ones, in trying to eat healthy,' explains Costa. A better understanding of all three responses can then be used to promote goal setting and striving processes that best motivate people to 'adopt the goal of healthy eating and regulate their food consumption accordingly.' Further, in terms of marketing and policy, research from PRIMEMEAL can be used to identify the necessary conditions to trigger appropriate self-regulatory responses of eating behaviour; in other words, putting into place the best conditions for individuals to succeed in achieving a healthier lifestyle.

It is important to understand that consumer choices are not made in a vacuum. There are many factors both personal and environmental that go into consumer

decisions. Unfortunately, says Costa, most research 'typically disregards important consumption decisions made prior to ingestion, like decisions made when shopping for groceries, preparing food at home or choosing dishes from a restaurant menu.' Their research, therefore, focuses on the efficacy of novel, psychological self-regulatory processes, like the activation of personal norms (self-standards of conduct, or sense of duty) about home cooking or the smart design of meal plans, grocery shopping lists and restaurant menus, in promoting healthier meal choices. The group has a unique approach to unravelling these factors too, using a multi-pronged approach of online, lab and field studies. Understanding how personal and environmental factors work in combination will enable more people to succeed in eating healthy and controlling their weight.

ENCOURAGING HEALTHY CHOICES

One particular area of research is focused on attributing health benefits to eating more meals at home. The findings have shown that information about the benefits can lead to more meals cooked from scratch. This information can be put to use by social marketing practitioners and policy makers, as 'it can be particularly effective in the context of health policy or nutrition education messages that stimulate the setting of healthy eating goals and raise individuals' sense of personal responsibility for achieving such goals.' Another, successful area of research so far, is working to elucidate how grocery shopping lists work to discourage impulse buying and



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help shoppers focus on purchasing the foods relevant to their healthy eating goals. Shopping lists and meal plans are important implementation tools for nutritionists and dieticians, but unfortunately, 'there is very little scientific knowledge about why, for whom and under which circumstances these tools are effective, and even less about the underlying self-regulatory processes at work,' says Costa; a situation the PRIMEMEAL team have already begun to reverse.

The project is not without challenges though. One of the current studies, aimed at testing the effects of menu design and nutritional information disclosure on consumer's meal choices, is proving quite tricky. 'As the realism of study settings and the applied nature of research questions and intended outcomes increases, along with the number of parties involved, ensuring the validity of the processes and tools implemented becomes ever more complex and difficult,' explains Costa. However, this project was uniquely designed to tackle these types of issues, she continues. 'So I am confident that it will be able to continuously balance sound scientific evidence with applicability and societal relevance.' Costa also attributes the success of the project so far to the strong research partnerships established. She is a member of the Cook & Health Network; an international and interdisciplinary group of scientists and practitioners devoted to the

study of the relationships between cooking, eating behaviors and health, as well as its public health policy implications. These types of collaborations are just another way in which PRIMEMEAL was designed to have the resources and skills available to succeed.

IMPLEMENTING RESULTS IN SOCIETY

While PRIMEMEAL is essentially an academic project, any practical results it may provide are badly needed to improve the lives of individuals, which in turn could help lower health care costs in several countries. Therefore, the final steps of the project involve partnering with members of healthcare services and policy makers to share such findings. The team is organising and hosting the 3rd Cook & Health Scientific Symposium at Católica-Lisbon in October 2019, which will include a special session devoted to PRIMEMEAL. E-PRIMEMEAL, a 3-year follow up project to investigate the effectiveness of digitally-mediated, behavioural interventions in promoting consumers' self-regulation of eating behaviour, has just been granted funding by the European Regional Development Fund and the Portuguese government. This dedicated team is showing that each of us, with a bit of knowledge, can commit and stick to making healthier choices; something that will benefit society as a whole and help combat the spread of the obesity epidemic.

Project Insights

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