

## [How to make healthy eating easier](#)



### **Written by**

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### **Category**

[Health](#)

### **Key topics**

[Health](#), [Risk](#)

## **Understanding how our attitudes to risk and our level of self-control influence our food choices could be used to make healthy eating easier**

Today's obesity epidemic costs the global economy around [\\$2 trillion a year](#), and worldwide [risk factors linked to poor diet](#) contribute to more disease than unsafe sex, alcohol, drugs and tobacco use combined. For decades, countries around the world have been wrestling with the same problem: how to help people eat better.

We all know about the potential bad health consequences of obesity and an unhealthy diet: diabetes, heart disease and cancer to name but a few. But many of us, despite our best intentions to cut portion size, fat and sugar, keep yo-yoing between losing weight and regaining it.

The one-size-fits-all approach to healthy eating and losing weight just isn't working, with evidence suggesting that, on average, [people lose just three kilograms over three years](#). Current solutions rely on education campaigns to improve consumer choices, such as limiting snacks to 100 calories and traffic light nutritional labels. These interventions work for some but not for all.

People who are more risk-loving have poorer nutritional balance, while the more risk averse eat better

Thinking that everyone will be able to do the right thing with enough information and encouragement is missing the point. The vast majority of us know what we should avoid eating and what is good for us: we just can't stick to it. As anyone who has ever attempted to diet knows, our attitudes, preferences and discipline all come into play when we are trying to eat more healthily.

## **Understanding how we make decisions**

To produce long-term improvements in eating habits, we need a better understanding of individual behaviours: why we make different choices, and the drivers that influence these decisions.

On average we make 35,000 decisions every day, [221 of which are food-related](#). So why do these decisions differ between people? There must be something deeply rooted in individuals that makes it hard for some of them to make the right choices to eat healthily and lose weight.

Ultimately, our individual decisions are determined by our behavioural preferences – namely our preferences for risk and our levels of self-control.

Worldwide risk factors linked to poor diet contribute to more disease than unsafe sex, alcohol, drugs and tobacco use combined

## **Risk preferences and self-control**

To understand risk preferences, it helps to use an analogy. Before flipping a coin, which option would you choose? Option A: heads win £12, tails win £8. Option B: heads win £20, or tails win nothing. On average, these options give you the same return (£10). But peoples' choices vary depending on their different attitudes to risk: those who are risk averse will take the safe bet and choose option A; risk-neutral individuals will be indifferent between both options; and risk lovers will choose option B.

Likewise, our level of self-control dictates whether we will delay gratification and wait for a bigger reward, or take what we can get immediately.

Because we are all different in our preferences for risk and our level of self-control, it is likely these preferences also influence our decisions about food. In particular, our attitudes to risk may influence how worried we are about the risk of developing diseases linked with our poor food choices, while our level of self-control can affect our ability to stick to healthy food choices. Only those with high levels of self-control will stick to their New Year diet resolutions!

On average, people lose just three kilograms over three years

## **Risk lovers have poorer quality diets**

In a recent study published in *The B.E. Journal of Economic Analysis & Policy* – and which [I presented at this year's World Economic Forum](#) in Davos – we mapped these behavioural types and investigated the relationship between a person's behavioural type and healthy eating decisions. For the first time, we used the Healthy Eating Index as an indicator of nutritional quality alongside height and weight (body mass index).

We found people who are more risk-loving have poorer nutritional balance, while the more risk averse eat better. In other research we discovered that people with higher levels of self-control, who are less inclined towards immediate rewards, appear to have a healthier nutritional balance.

Because we are all different in how we perceive risk and self-control, we not only act differently but we will also respond differently to interventions. Therefore, we need to design solutions based on different behavioural types defined by our risk preferences and level of self-control.

The vast majority of us know what we should avoid eating and what is good for us: we just can't stick to it

For individuals who lack self-control, for example, we could devise interventions through which they commit in advance to their daily meals. This would help to guard against bad on-the-spot decision making and help them stick to their eating plan for longer. For risk lovers, who get a sense of wellbeing from taking risks in order to earn a large amount of money, a big motivating stick might be to reward them with a chance to play high-payoff lotteries if they lose weight.

To develop these smart behavioural-rooted prevention interventions, we need to measure risk and self-control routinely in the same way we monitor sugar levels or blood pressure.

## **Promoting healthier communities around the world**

In collaboration with Imperial colleagues at the Nutrition and Food Network and the NIHR Global Health Research Unit in Cardiovascular Disease & Diabetes in South Asians, we are validating our findings in other countries — for example, in [Sri Lanka](#), [India](#), [Pakistan](#) and [Bangladesh](#), where obesity and diabetes rates are climbing. We are designing and evaluating interventions based on behavioural types (defined by risk preferences and levels of self-control) that will help people eat better and result in healthier communities.

We also plan to test whether behavioural types not only dictate food choices, but also have an impact on how people respond differently to interventions. Ultimately, we hope that our work will help bring a step change in tackling the global obesity epidemic.

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## About Marisa Miraldo

Professor of Health Economics , Co-Director of Imperial's School of Convergence Science in Health and Technology

Marisa Miraldo is Professor of Health Economics and Co-Director of the Centre for Health Policy. She is also a co-director of the Health & Technology theme within the School of Convergence Science and a member of the Centre for Health Economics & Policy Innovation.

She is a fellow of Imperial's Data Science Institute and currently leads the Health Research stream at the Data Analytics Centre, as well as participating in strategic groups on nutrition and vaccines. Professor Miraldo was also programme director for Executive Education course Advanced Management Programme in Health Innovation.

Her research focuses on the economics and policy of healthcare innovation, the impact of policies on organisational performance, and the behavioural determinants

of decision making. Professor Miraldo has delivered several public talks and has published in many journals, including Social Science and Medicine and the International Journal of Infectious Diseases.

Read [Marisa's Imperial Profile](#) for more information and publications.

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