

# Designing with the grain of human behaviour: applying behavioural insights to promote healthy diets

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January 2021



In partnership with



Cabinet Office

# We'd like to talk about...

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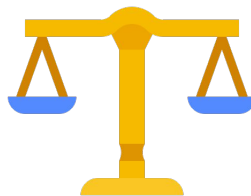
## **BIT**

Who we are, where we come from, and our mission



## **Healthy eating**

A unique opportunity to positively change people's lives



## **Dual process models**

Understanding the drivers of human behaviour



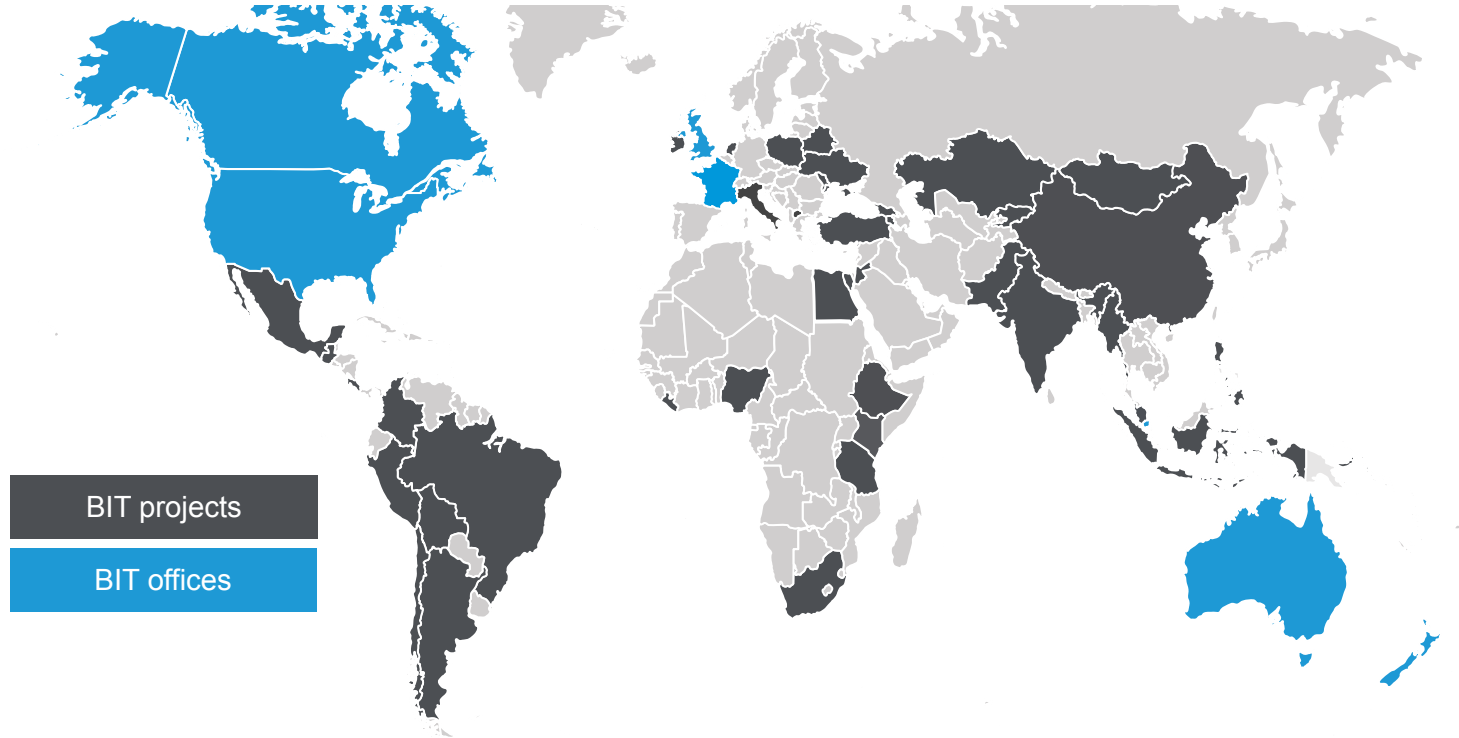
## **EAST and CHL**

How to apply behavioural insights to promote healthier food choices

# A bit about BIT



BIT is a social purpose company part-owned by the UK Cabinet Office. Our aim is to improve people's lives through the application of behavioural insights and empirical methods.



# The importance of promoting healthy eating

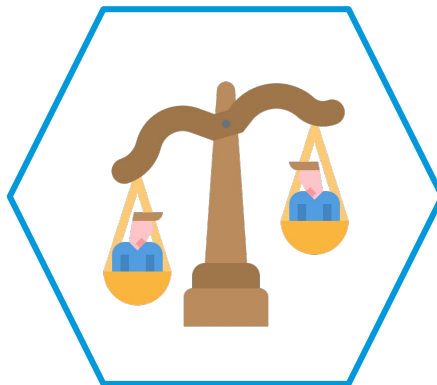


Unhealthy diets have a strong impact on people's health and wellbeing and contribute to generating health inequities in our society.



## Overweight and obesity

In the UK, 63% of adults and 34% of children are overweight or obese



## Health inequities

Poor diets are unequally distributed in our society: obesity rates are 80% higher in UK's most deprived areas compared to the least deprived



## Chronic conditions

Unhealthy diets cause 107,000 deaths per year in the UK and are the 2nd biggest cause of death worldwide

# A unique opportunity to positively impact people's lives



Decision makers in the food industry and in retail environments have a unique opportunity to promote healthy diets and positively impact the health and wellbeing of the nation, and beyond.

67%

of the **food budget** in the UK is spent on meals and snacks purchased in grocery stores and eaten at home

76%

of the food budget in **low-income families** is spent in grocery stores

5+

**systematic reviews** of scientific studies suggesting that interventions in retail environments can have a powerful impact on people's food choices

# How can behavioural sciences help to make the most of this opportunity?



How interventions to promote healthy food choices tend to be designed...

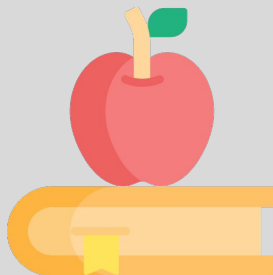
## General public

*I want to be able to make healthy choices... But I do not like to be forced or feel guilty about what I eat!"*



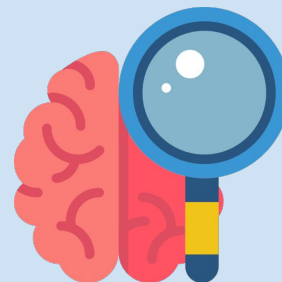
## Decision maker

*"Let's provide information about what is healthy so people will select the healthy options"*



## Behavioural scientist

*"Information is very important ... but isn't really sufficient to promote substantial and sustained behaviour change"*



# Dual process models: a lens through which to understand human behaviour

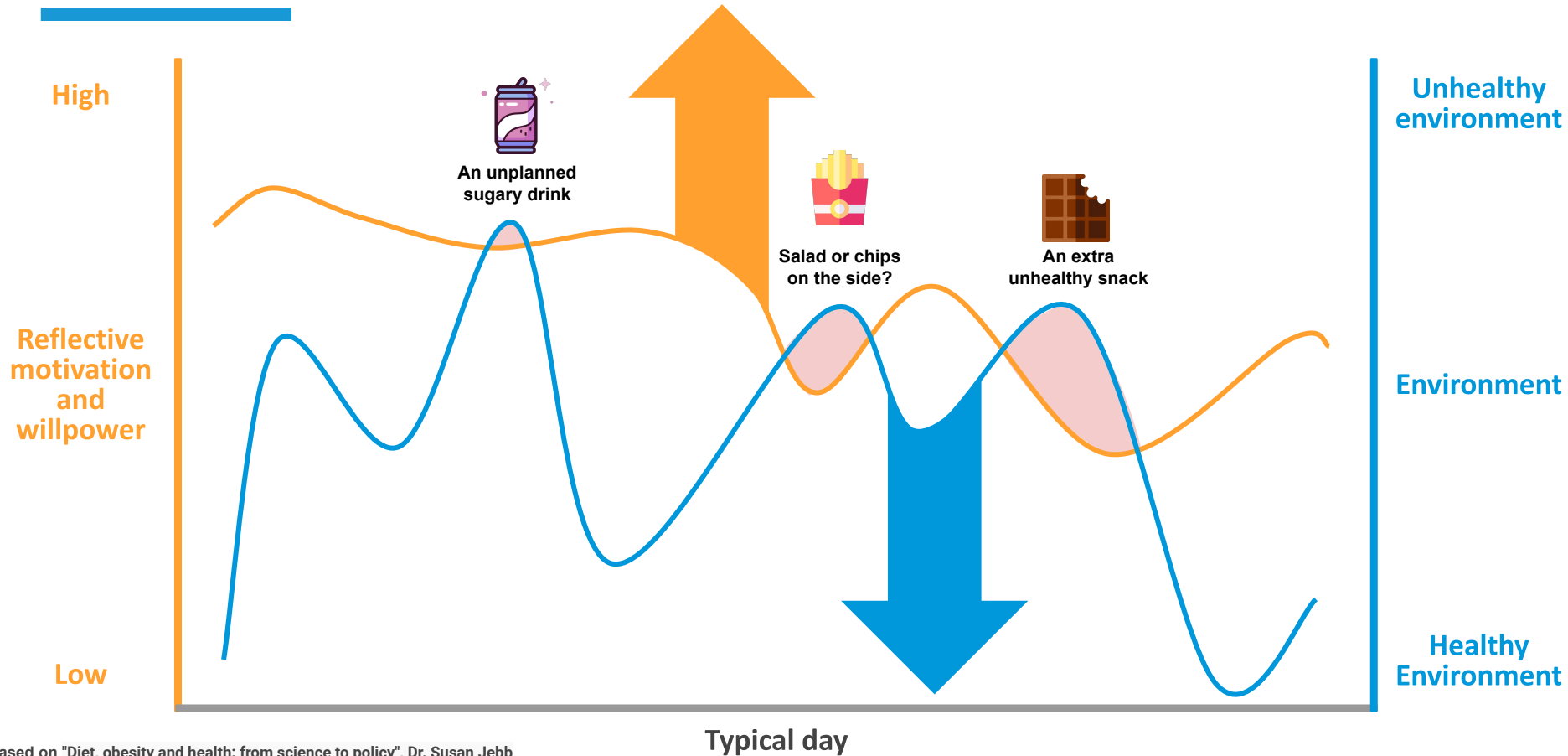


"It turns out that the environmental effects on behavior are a lot stronger than most people expect"

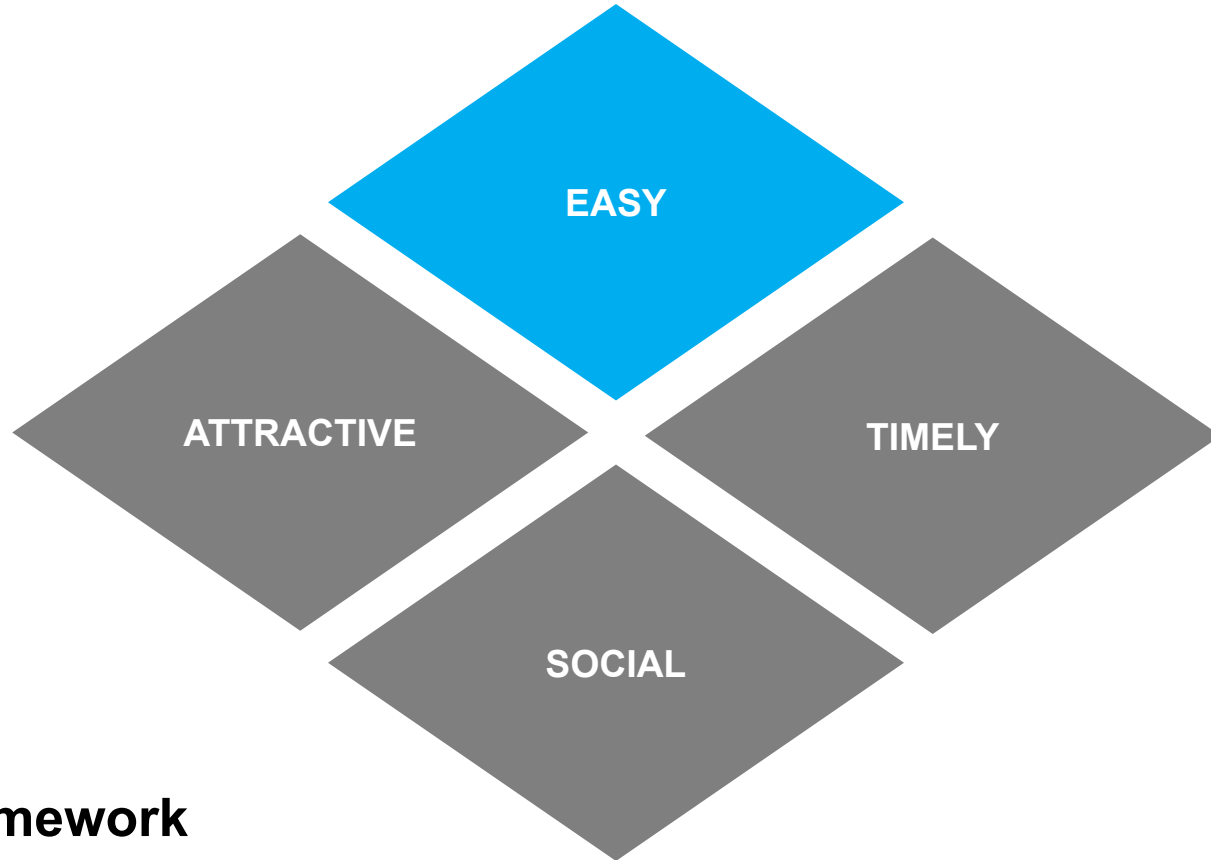
**Daniel Kahneman,**  
Nobel Laureate



# Dual process models: a lens through which to understand human behaviour



# The EAST framework: A toolkit to design behavioural interventions



**EAST Framework**

# Make it **easy**



EASY

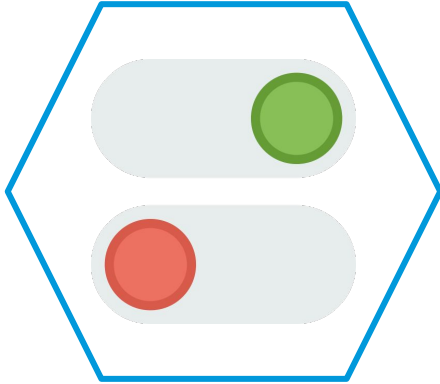
ATTRACTIVE

TIMELY

SOCIAL

# Make it **easy**

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**Set healthy defaults**



**Positioning**



**Availability and reformulation**

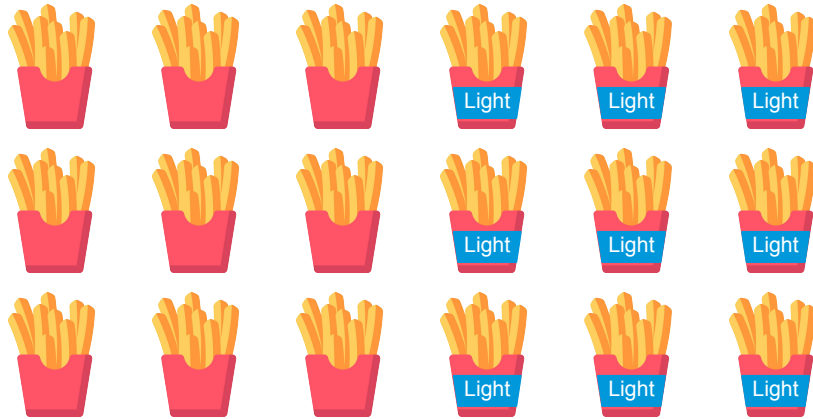


# Case study: Altering the availability of (un)healthy foods

- + Add healthy foods to the range
- Remove unhealthy foods from the range
- ÷ Shift the proportion of healthy vs unhealthy foods

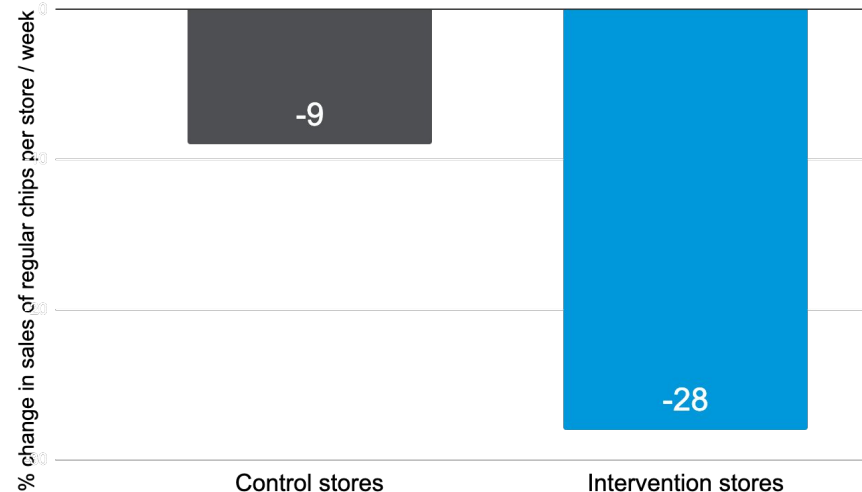
On average, availability interventions reduce the amount of energy consumed per snack occasion by **17%**.

As part of a CHL project, McCain and Tesco implemented this strategy in 35 stores:



Standard frozen chips

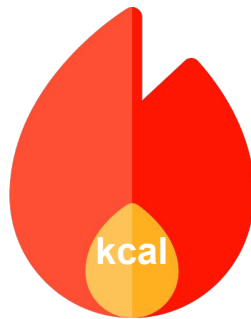
Light chips



# Case study: Altering the availability of (un)healthy foods



There was an **uplift in the sale of 'light chips'** that was similar in size to the reduction in the sale of regular chips.



Across the 35 intervention stores, the intervention might have led to a **cumulative 700 kcal weekly reduction** in customers' shopping baskets (assuming direct switching).



Across the 35 intervention stores, the intervention might have led to a **cumulative 70g reduction in saturated fat** in customers' shopping baskets (assuming direct switching).

# Make it attractive



ATTRACTIVE

EASY

TIMELY

SOCIAL

# Make it attractive

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**Focus advertisement on  
healthy and sustainable  
products**



**Align economic incentives**



**Price promotions**

# Case study: Promoting healthy foods through price interventions



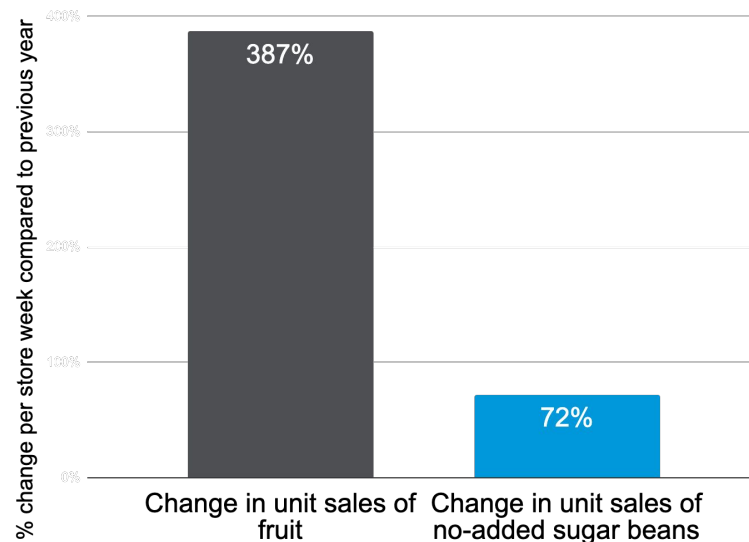
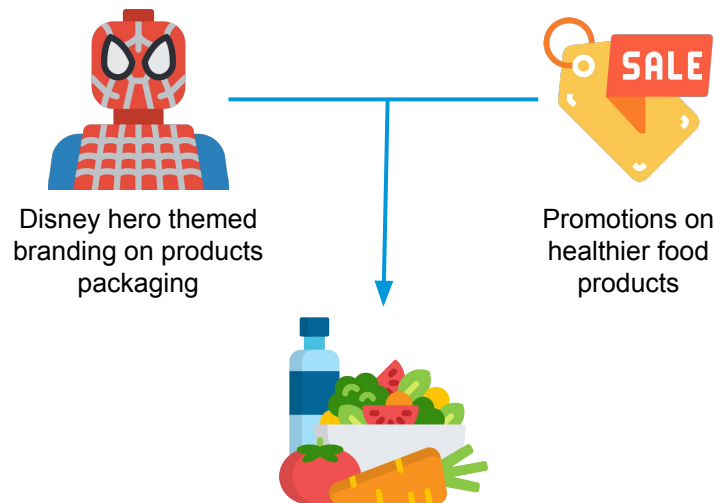
Grocery store interventions to change food purchasing behaviors:  
a systematic review of randomized controlled trials

Jamie Hartmann-Boyce, Filippo Bianchi, Carmen Piernas, Sarah Payne Riches, Kerstin Frie, Rebecca Nourse,  
and Susan A Jebb

Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, United Kingdom

*Of interventions evaluated in grocery stores, those manipulating product prices had the greatest likelihood of significantly influencing the selection of healthier food products.*

As part of a CHL project, Sainsbury's implemented promotions across their stores nationally:



# Case study: Promoting healthy foods through price interventions



Grocery store interventions to change food purchasing behaviors:  
a systematic review of randomized controlled trials

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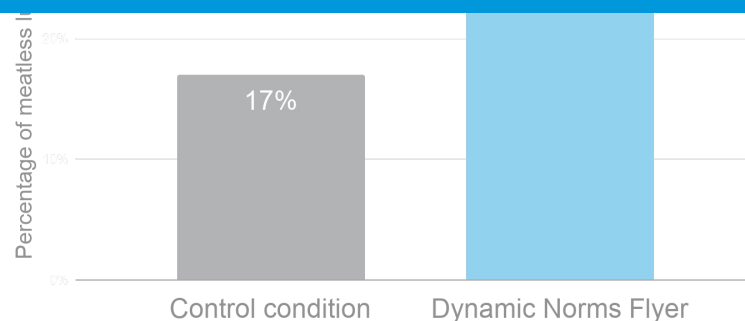
*Of interventions evaluated in grocery stores, those manipulating product prices had the greatest likelihood of significantly influencing the selection of healthier food products.*

But how can we promote long term behaviour change?

Disney hero-themed  
branding on products  
packaging



Promotions on  
healthier food  
products



# Make it **social**



EASY

ATTRACTIVE

TIMELY

SOCIAL

SOCRATES '09

# Make it social



Is the **current norm** in line with the desired behaviour?

**Use static norms**  
(e.g. 80% of people consume enough fruit and vegetables)



Is the **norm changing** over time to become more in line with the desired behaviour?

**Use dynamic norms**  
(e.g. most people have increased their F&V intake over the past year)



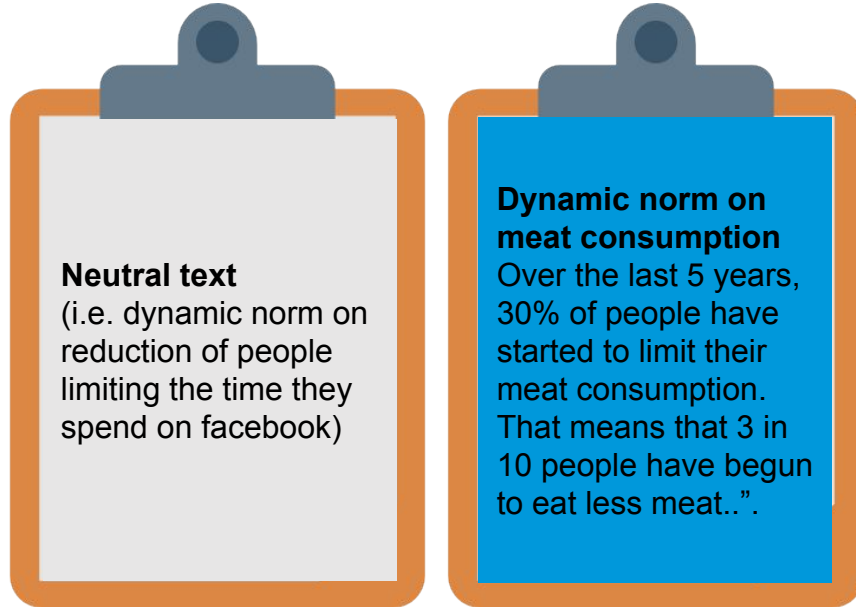
Is the norm to **approve or enjoy** the desired behaviour?

**Use injunctive/liking norms**  
(e.g. most people enjoy consuming F&V)

# Case study: Using norms to promote sustainable food choices



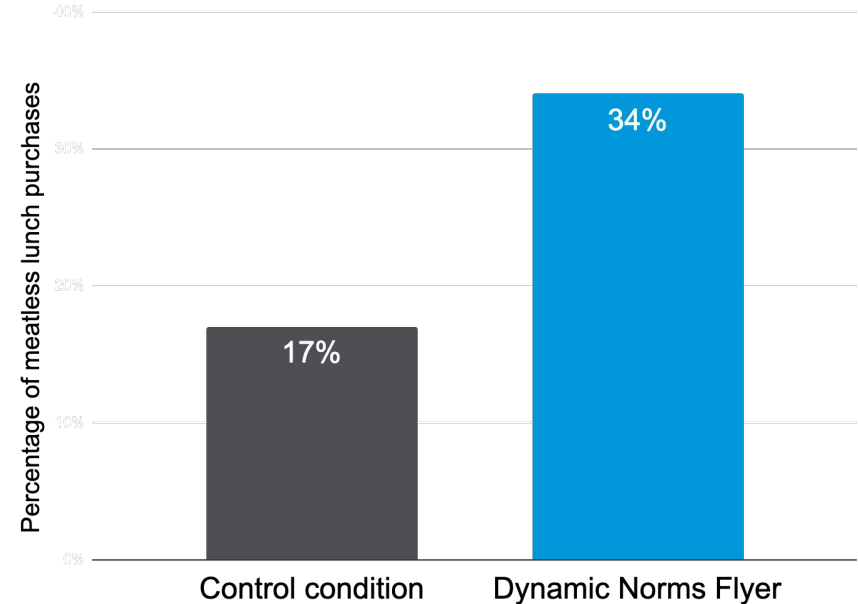
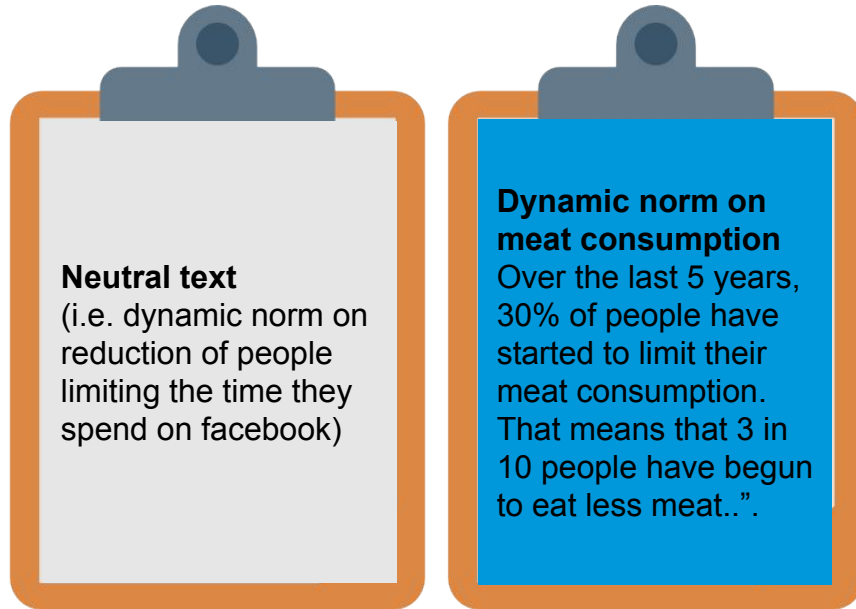
While waiting to order at a cafe, people were randomised to see one of two flyers:



# Case study: Using norms to promote sustainable food choices

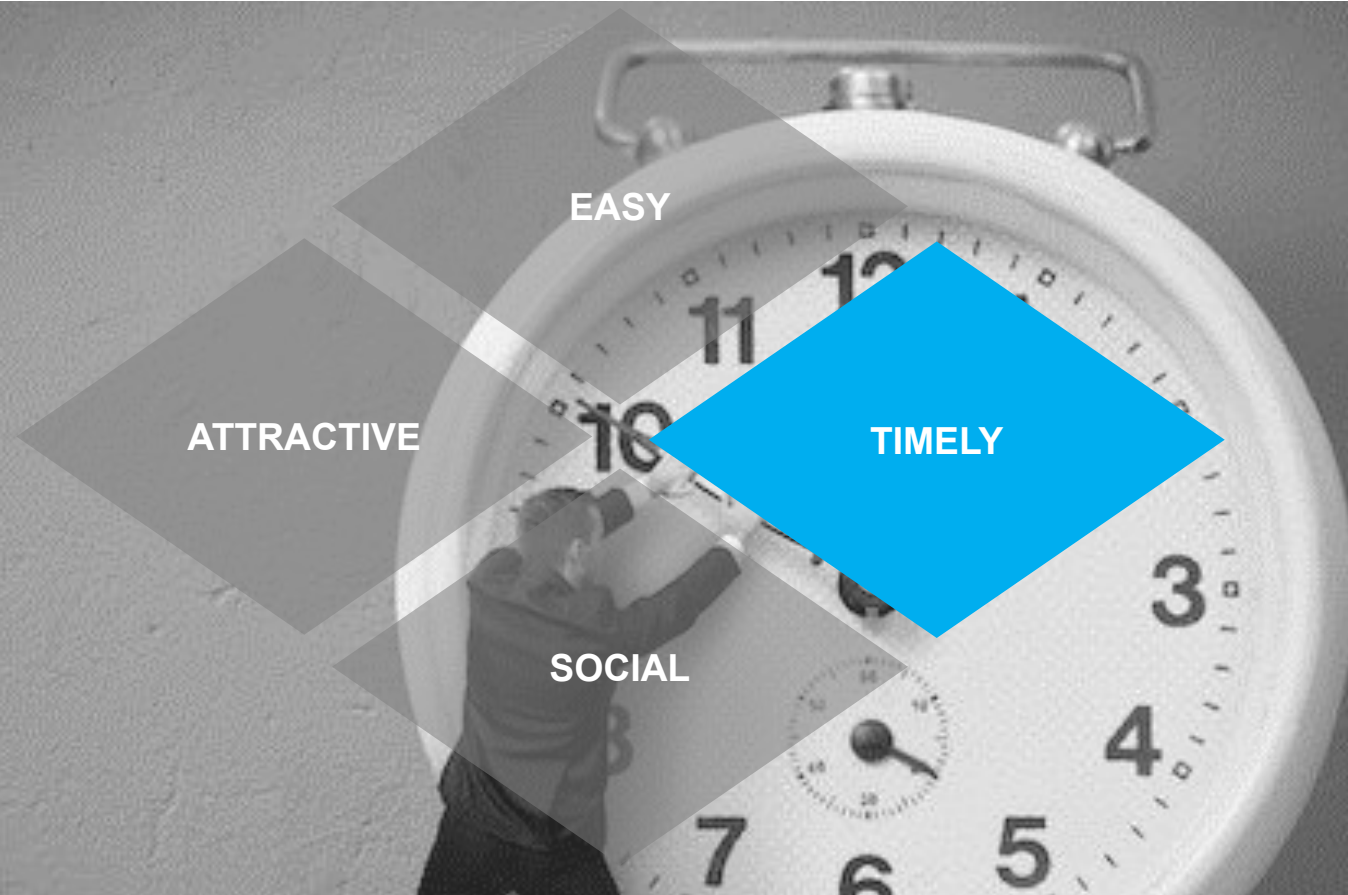


While waiting to order at a cafe, people were randomised to see one of two flyers:



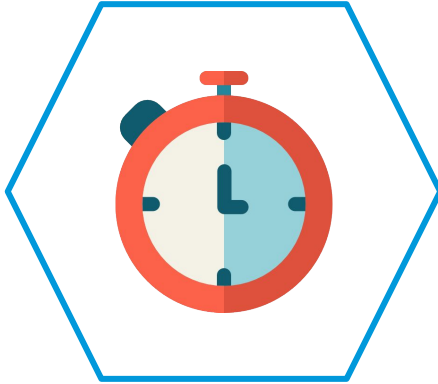
# Make it **timely**

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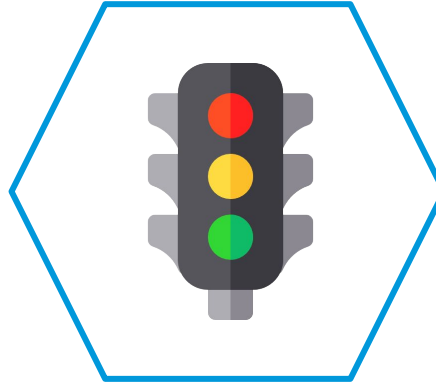


# Make it **timely**

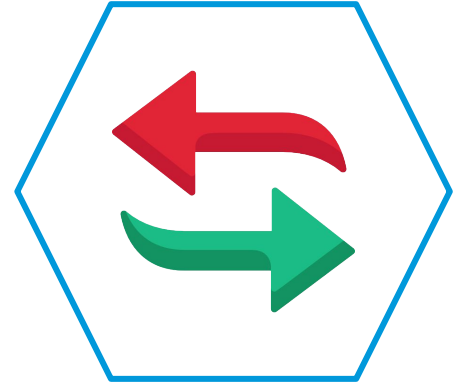
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**Tackle future  
discounting**



**Intervene at point of  
selection**

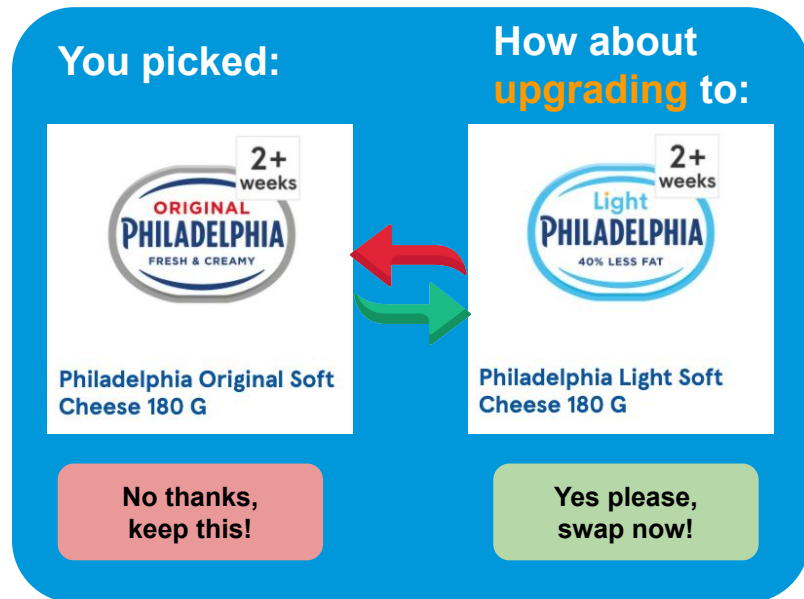


**Offer healthy and sustainable  
swaps**

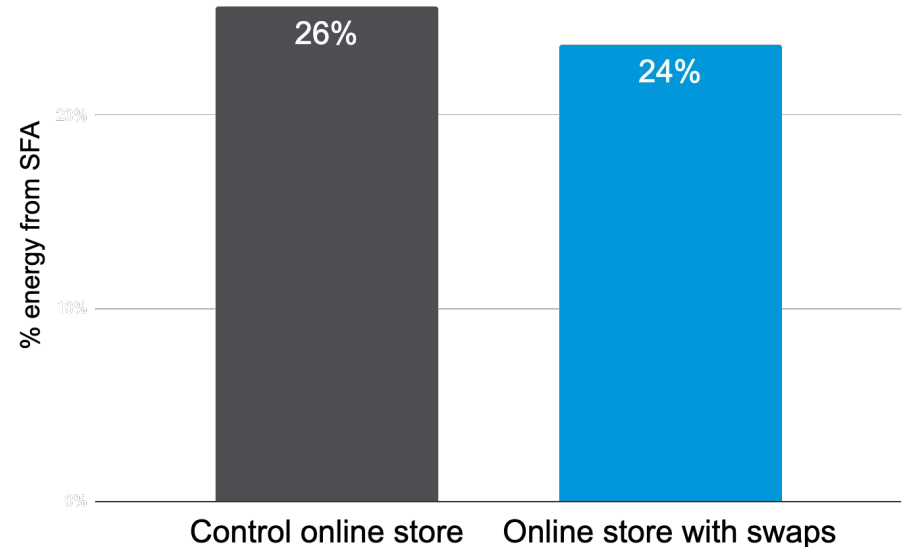
# Make it **timely**



Food choices are often automatic reactions to our food environments. An effective way to help people stop and reflect about what foods we really want to take home are 'swap' pop-ups



Applying this technique to saturated fats....



...with no significant impact on costs, energy, sugar, or salt.

# Ranking the effectiveness of interventions



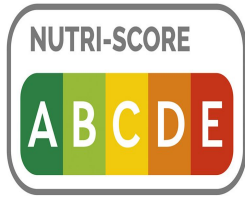
Information

Information  
provision

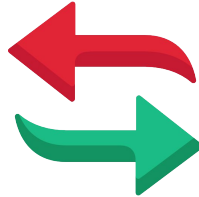


Effectiveness

# Ranking the effectiveness of interventions



Labels



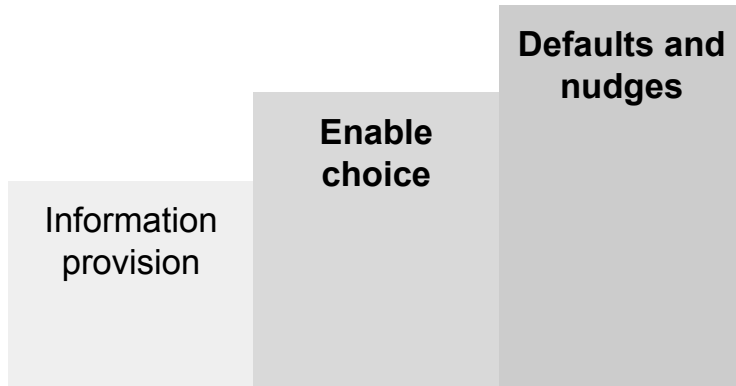
SWAPs



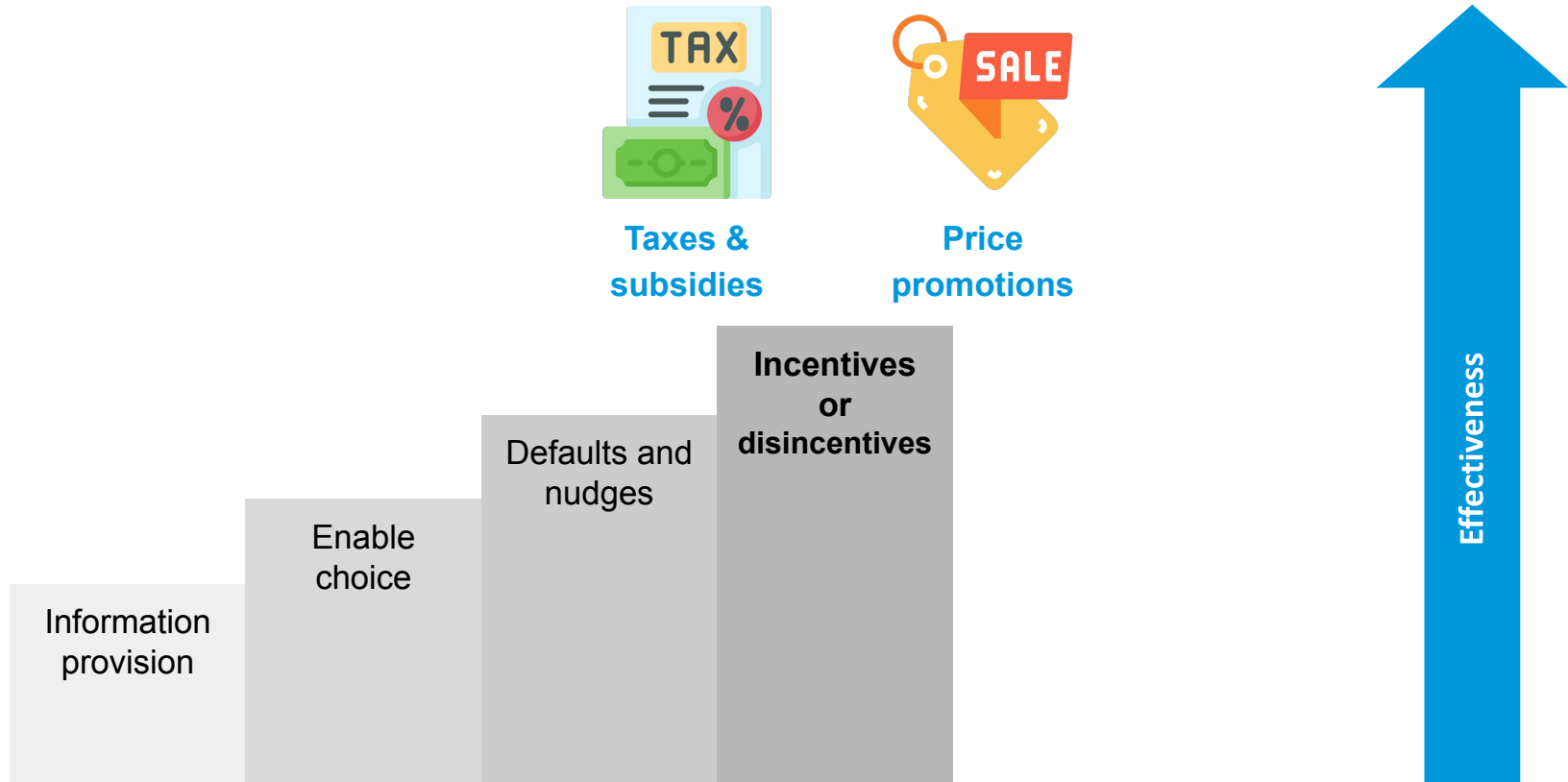
Positioning



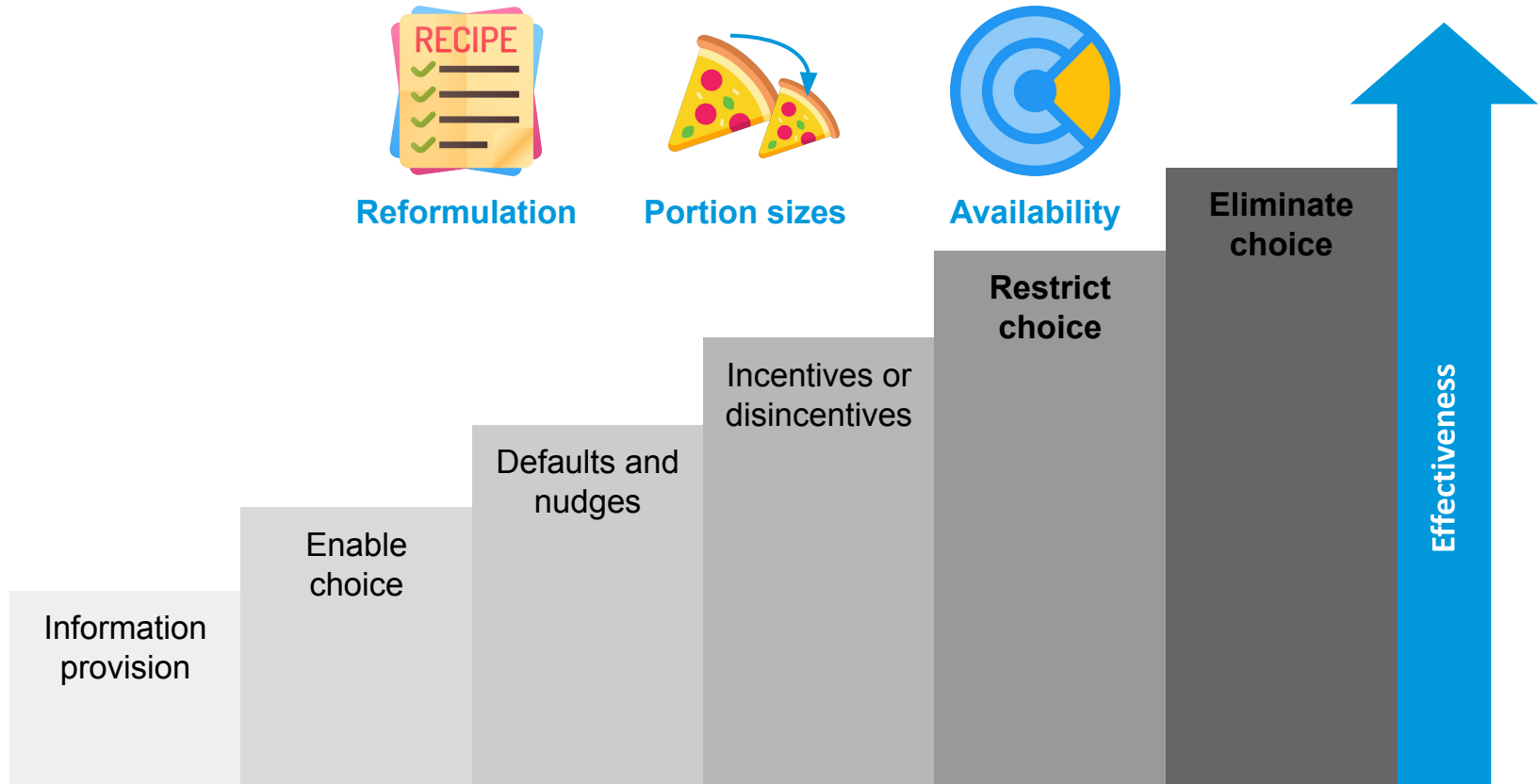
Effectiveness



# Ranking the effectiveness of interventions



# Ranking the effectiveness of interventions



# Future directions



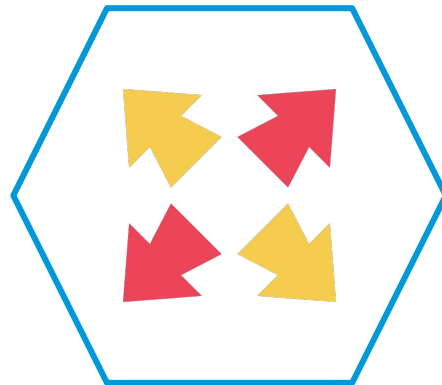
It is great to see so many industry partners joining the Collaboration for Healthier Lives and make positive steps in the right direction to promote healthier and more sustainable diets. What is the ambition for the next year(s)?



**Moving from individual interventions to healthy environments**



**Exploring avenues to promote sustained, long-term behaviour change**



**Scale up effective interventions across product categories and settings**