



EHPS Policy Summary

Changing environments to change health behaviour

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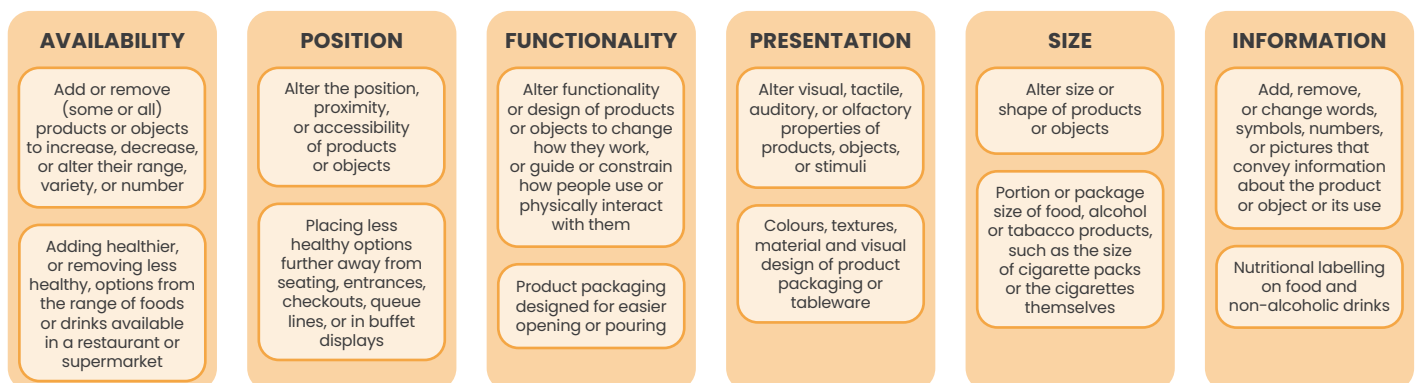
The importance of changing health behaviours

Health-related behaviours, including the unhealthy consumption of food, alcohol and tobacco, add to the burden of non-communicable diseases, such as heart disease, cancers and Type II diabetes, which are estimated to be responsible for 71% of deaths globally (WHO, 2021). There is evidence that the environment has a major influence on these health behaviours, and therefore altering the environment is one technique which can be used to encourage healthier behaviour. Changes to the environment to change behaviour are often called choice architecture interventions (or nudges)¹.

Choice architecture interventions

- Interventions that require individuals' agency to change behaviour, such as information-provision and education, are often ineffective (Adams et al., 2016), in part because people need time to process and act on information and may not always be able to act in the way they plan to.
- In contrast to these traditional information-based approaches, choice architecture interventions usually only require minimal engagement from individuals (Marteau et al., 2012). This may mean that they are more likely to have an equitable impact across demographic groups (Adams et al., 2016).
- This summary focuses specifically on interventions that change cues in a physical environment or which alter what is physically available within a small-scale environment, such as shops, pubs, schools and homes (Hollands et al., 2017).
- Figure 1 gives six key examples of how these small-scale environments can be changed, by altering availability, position, functionality, presentation, size, or information, and Table 1 gives an example case study for each of these.

Figure 1. An overview of the ways in which small-scale environments can be altered to change health behaviours (adapted from Hollands et al., 2017).



¹ We note that "nudging" is interpreted in many ways by different researchers and behaviour change practitioners. We use a more precise terminology and set of interventions listed here that does not capture the full range of "nudges" that have been previously described by others.

Table 1. Case studies of promising interventions.

Intervention type	Case study
Availability	Non-alcoholic drinks in online supermarkets In an online supermarket setting, increasing the proportion of non-alcoholic drinks that were available from 25% to 50% or 75%, increased the proportion of non-alcoholic drinks selected and purchased (Clarke, Blackwell, et al., 2023). Systematic reviews of these types of interventions on food products also support their likely effectiveness (e.g., Hollands et al., 2019).
Position	Food placement at supermarket checkouts Between 2013 and 2017, supermarkets in the UK implemented a policy to reduce the display of foods such as sugary confectionery, chocolate and crisps at checkouts. This was shown to reduce purchases of these less healthy items by 17% (Ejlertskov et al., 2018). Systematic reviews of these types of interventions also support their likely effectiveness (e.g., Hollands et al., 2019).
Size	Food portion sizes in cafeterias In 19 worksite cafeterias, reducing the size of certain products by 10–17% led to a 6.6% reduction in energy purchased (Reynolds et al., 2021). Systematic reviews of these types of interventions also support their likely effectiveness (e.g., Hollands et al., 2015; Holden et al., 2016).
Information	Calorie labels on food A review suggests that calorie labelling on menus and products might lead to small but potentially meaningful reductions (1.8%) in energy purchased in field settings, such as restaurants or supermarkets (Clarke, under review; Crockett et al., 2018).

Acceptability and ethics

- Ethical concerns about choice architecture or nudging interventions most often centre on ‘nanny state’ interference (Blumenthal-Bary & Burroughs, 2012).
- However, similar interventions are already used widely in commercial settings with the aim of encouraging people to buy more, for example supermarkets often use placement interventions to increase sales (Kendall, 2014). Instead, we can use them more positively in our environments to support people to make healthier choices.
- These types of interventions may have been neglected in the past since we tend to overvalue individual decision making and underestimate the impact of our environment on our behaviour. For example, while most agree that advertising works, we tend to view the effects of advertising as greater on others rather than ourselves (Eisand, 2017).
- Evidence suggests the public generally support the implementation of these interventions to improve health (Reynolds et al., 2019; Sunstein et al., 2018).

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