

Consumer Shopping Behaviour: Contextual Factors

1. The **total available information** that in principle consumers are faced with when shopping
2. The **average amount of time** that shoppers direct towards information that informs their consumer decisions
3. New **informational sources** available to consumers that they use to inform their choices

Without first outlining these background factors and how they impact consumer choice behaviour, any understanding of the impact of any particular label on pre-packed food items cannot be fully understood.

Informational Landscape: Any given pre-packaged food product on a supermarket shelf (or online) contains a multitude of information on the front and back of the packet. The requirements generally are that a pre-packaged food product contains the following: 1) Name of the food; 2) List of ingredients; 3) Allergen information, 4) Quantitative declaration of ingredients (displayed as %); 5) Net quantity; 6) Storage conditions and date labelling (for example best before date/use by date); 7) Name and address of manufacturer; 8) Country of origin or place of provenance; 9) Nutritional declaration (displayed as %); 10) Additional labelling requirements (for example for certain foods details about the presence of sweeteners needs to be included).

Along with this, there are also formatting requirements^[6] prescribed in law for the information presented on the packaging. Without taking into account additional **marketing information** ^[7] (for example nutrient claims, [for example “high fibre” or “rich in omega 3], premium offer promotions, and celebrity endorsements), and **price**, and **other additional labels** (for example carbon emissions), based only on the labelling information listed in the previous paragraph, a consumer selecting a pre-packaged food product will be presented with ten pieces of information.

Frequency/volume of decisions: Another factor to take into account is the scale of food choices a consumer faces in an average week. This can be considered by the proportion of time buying food that is consumed at home, and the remainder that involves consumption outside of the home. In the 2000s, for individual consumers in the UK, eating out accounts for 30% of food expenditure in an average week (eating out on average 3 times per week), with the rest accounted for by food shopping stores (for example supermarkets). Put another way, during this period over a quarter (27.1%) of adults and one fifth (19.0%) of children ate meals out once per week or more. One fifth of adults (21.1%) and children (21.0%) ate take-away meals at home once per week or more. From 2008-2012, a quarter of UK adults ate out once a week or more often, and more recent figures for 2016 suggest that 39% of UK adults reporting eating out at least once a week. Thus, this gives some indication of the proportion of time spent purchasing and consuming food outside of the home, though food purchasing in the UK is still primarily oriented for consumption in the home.

Currently, with figures relating to 2019, an average weekly shopping basket contains approximately 33 staple items (note that in other studies this is estimated at 57 items), although this of course excludes smaller shopping trips that people now make during the week outside of a large weekly shop.

Figures also indicate that people spend on average (in bricks and mortar supermarkets) 41 minutes (down from an estimated 47 minutes in 2012-2013) in an average weekly shop

(comparable with the US – 43 minutes), and approximately 38 minutes online [8].

From this, it is then possible to determine some estimate of the average length of time that consumers will spend making a decision about a given food item they will purchase; accepting the fact that they will be somewhat inaccurate given various factors.

A conservative estimate then, taking some of the aforementioned factors into account, and estimated decision times, is approximately 9 to 17 seconds, with a grand average of 12 seconds. For a comparison, recent estimates for decision times on selecting food items during online weekly shopping purchases is 5-10 seconds.

A conservative estimate will be that 80% of the food items will be pre-packed ; which may mean slightly longer decision times and other practical aspects. This means that, based only on Food Information Regulations 2014 (FIR) and Retained EU Law (REUL) Regulation (EU) No 1169/2011 on the provision of food information to consumers (EU, FIC), along with policy areas that regulate food safety (Department for Environment, Food and Rural Affairs, DEFRA), there are approximately 10 items of information that will appear on the packaging (excluding price, and other marketing information). The consumer would therefore have approximately 1 second to process each item of information. Cognitively, this implies encoding, translating, and integrating each item of information with each other item of information . Evidence suggests that top two most salient factors that consumers attend to when making the purchasing decisions are price and quality.

Unplanned spending: One important area of research in the domain of shopping behaviour, whilst popular in the academic community (computer science, psychology, business management), but somewhat ignored outside of this, is the role that shopping lists play in determining what is bought, and how much more is bought outside of what is on the list⁹. This may seem somewhat tangential to the main focus of this report, but this area of work reveals two critical aspects that account for consumer shopping behaviour – without lists people use in-store products as memory cues of items they need, and that promotional offers play a critical role in informing the decisions people make about what to buy.

The incentives of any large food business operator, such as a supermarket, is to increase the time spent in the store, and increase time spent travelling across aisles to maximise the likelihood of exposure to more products, so as to purchase more items.

For this reason, work in the domain of unplanned purchases provides critical insights into the volume of unplanned items bought, and in turn, the marketing and advertising mechanisms that lead to this. The food industry is oriented toward innovating the ways it can increase sales, and work on planned and unplanned purchasing shows that, without a shopping list, a consumer will make many unplanned purchases. The factors that lead to this are highly driven by promotional offers that gain consumer's attention. In addition, an emerging trend that is gaining in uptake by consumers is in-store smart phone use , which in turn informs their choice behaviours. Smart phone use often accompanies choices because this too is where consumers seek out promotions and coupons to determine offers that present value for money and which can be used to reduce the overall costs of their weekly shopping. Moreover, supermarkets are also utilising smart phones to increase the efficiency of shopping, and even replace typical cashier tills.

Why does all this matter? This work matters because all these contextual factors need to be understood in the context of the informational landscape that the consumer faces while carrying out their food shops. Several tactical in-store mechanisms (and online) are being used to encourage consumers to attend more to price critical information, which we already know from other work [20] is one of the most salient pieces of information that guides their choice behaviour.

Summary: Why do this kind of analysis? We need to consider what information is required to appear on pre-packed food items, and realistically consider the amount of available time people

have to spend attending to it, along with the likelihood they would attend to it, and in turn use it to inform their choices. All of this will be considered in the next main section of this report.

A conservative estimate of 12 seconds, (most likely significantly less for online shopping), is arrived at, which means that this is the available time spent on any one food item in a supermarket. For online shopping, the time spent reviewing food items will be less because of differences between the physical presentation of food on shelves compared with the presentation of food items by category on webpages. In addition, previously stored preferences of food choices are retained on supermarket websites when completing online purchases, which also decreases the time spent reviewing food items to include when shopping online. We know that consumers prioritize that time attending to price to determine affordability, brand/marketing information to determine quality, and promotional offers to determine value for money (especially if they consult with their smart phone while shopping). The top most ranked sources of information are not included in the ten required items of information on pre-packed food.

Thus, to promote healthy, safe and sustainable diets through food product labelling (as well as labelling on menus), there are critical psychological and practical factors that need to be accounted for given the mental processing time available, along with the values and interests of an average UK consumer. To intervene effectively on consumer behaviour, the point at which an intervention is introduced is critical to maximise the chances of consumers attending to information that will encourage them to seek healthier, safer and sustainable diets.