Food System Strategic Assessment: Trends and issues impacted by changes in consumer attitudes

Figure 7: Issues and trends impacted by changing consumer attitudes and estimated timeline to impact as highlighted by experts consulted for this study. Most relevant issues and trends with regard to the FSA remit are discussed in this section.

Recent trends with regards to changing consumption patterns such as eating less meat, more plant-based alternatives and generally choosing more healthy and sustainable foods have received much attention and media reporting over the past five years. While in the recent past these trends were seen as stable and progressing it appears now that their magnitude, predictability and trajectory is likely to change in the near future.

3.1 Driver: changing consumer attitudes, status March 2023

Consumer attitudes: increasing unpredictability and variability in consumer choices over the next three years.

Very recent economic developments may have rapidly changed consumer motivations and intent for the near future. Consumer attitudes that appeared to present clear tends a few years ago may undergo shifts in the near future driven mainly by current economic pressures. This may particularly be the case for choices regarding more sustainable or healthy foods possibly impacting the growth of foods produced with novel technologies or ingredients that promise environmental and sustainability benefits.

Current high food prices are a major factor impacting consumers. It is most likely this will slow down growth in voluntary healthy and sustainable choices, which is supported by recent consumer studies (Burton, 2023). This correlation of consumer behaviour change and food prices is of particular importance to watch, as rising food prices are very likely a long term trend that is expected to impact consumer choices for the next decade. This view is not only supported by many experts consulted in this study but also by recent studies that have modelled different future scenarios of food system evolution, all predicting substantially rising food prices (Elliott, 2021). This implies that efforts to promote healthy and sustainable food choices will need to consider this economic context for the longer-term future.

Moreover, recent studies have repeatedly highlighted an overall trend towards being supportive of more sustainably produced food (54% in an August 2021 study), or seeking out healthier, fresher more natural foods (Heard & Bogdan, 2021; Which?, 2021). However, this is not necessarily translating into one clear trend towards large-scale diet change associated with more sustainable food choices, such as a shift away from a meat based diet. The current estimates of vegetarians and vegans in the UK are stable at around 5-7% and 2-3% respectively according to YouGov tracker data captured over the past three years, and 71% of consumers reporting to adhere to a meat based diet (including poultry), only a slight decrease from 73% in 2019 (Prescott-Smith & Smith, 2022; YouGov, 2023).

Furthermore, survey data shows that consumers expect government and the food industry to support implementing higher environmental and nutritional standards to a much greater extent than previously. Moreover, consumers often perceive they themselves do not have much power to change the food system and point out that information about healthier and sustainable food would be often difficult to understand and clearer messaging would be necessary (FSA, 2021; Public Health England, 2020; Which?, 2021). This is also evidenced by recent consumer survey data showing that consumer understanding of food sustainability is often guided by misconceptions such as packaging and origin of food would be more important to food sustainability than the environmental footprint of the kind of food consumed. For example, around 50% of consumers reported to not know about the negative environmental impact of red meat (Which?, 2021).

3.2 Increased volatility of consumer decision-making concerning healthy and sustainable foods, meat reduction, and meat alternatives

A number of consumer trends have been closely monitored recently due to their potential to shape a transformation of the food system. Major consumer trends, as highlighted by experts consulted for this study, with a perceived impact on shaping the future evolution of the food system are presented in the following sections.

3.2.1 Healthy and sustainable foods

In the past decade it has increasingly become acknowledged that consumers will need to make different choices in the future for achieving wider global health and sustainability goals. Consumer awareness and understanding of the importance of sustainable and healthy food choices has increased in the past decade, although considerable misconceptions around what matters for environmental impact of a food item exist among consumers (Borghesi et al., 2022; van Bussel et al., 2022).

Experts consulted for this study suggested that major shifts in consumer choices would need to manifest at scale to achieve sustainability goals and a transformation of the food system. However, it is well evidenced that generally consumer choice motivation is volatile and mostly not based on rational decision-making or relevant objective information, but rather on taste and convenience. The literature on consumer psychology finds beliefs, goals, and habits are the main motivational factors driving choices, and that often the understanding of certain food categories is guided by misconceptions. For example, food is perceived as healthier when it weighs less, looks prettier, is labelled as organic, or is served cold (Goukens & Klesse, 2022). Hence, attempts to change consumer behaviour via more objective information might be intrinsically limited. The difficulties around influencing consumer decision-making are even more pronounced with regards to sustainability of food, as this is a newer concept compared to health, with still unclear messaging for consumers. While many have 'intuitions' such as that 'local' food would be more sustainable even if that is not necessarily the case, it is clear that most consumers lack information and understanding on what is meant by sustainability (the sustainability of what), as the term is perceived in various ways, which also makes already existing sustainability signalling on products inefficient (Sigurdsson et al., 2022; Stein & Santini, 2022; van Bussel et al., 2022).

Apart from these general aspects of consumer decision making the current cost of living crisis is likely to be the main factor impacting and shifting consumer choices at the moment. A study by the Agriculture and Horticulture Development Board (AHDB) published in January 2023 reports that over the past year food choices made for health reasons have consistently declined over six consecutive time periods in the UK, well in line with the increase in household food insecurity highlighted in section 2.3 (Burton, 2023). This may make influencing consumer behaviour with regards to healthy and sustainable food choices more difficult in the short-term, and may slow down a trend towards such choices.

3.2.2 Meat reduction

With regards to longer term consumer trends that have been monitored with a view of how they might positively impact the future evolution of the food system, overall meat reduction (in particular red meat) and the purchase of plant-based meat alternatives were mentioned prominently by experts consulted for this study. A study published in 2021 reporting that red meat consumption in the UK had decreased by 17% between 2008 and 2019 together with a slight reduction in processed meat consumption based on self-reporting data of food intake has received considerable media attention (Stewart et al., 2021). EU meat consumption per capita is expected to drop from 69.8kg in 2018 to 67kg by 2031 (European Commission, 2021).

However, other data based on household food spending indicates that the real reduction in meat consumption might have been as low as 3%, or based on overall meat supply data, more in the range of 5% over the same time period (FAO, 2023; Smith & Garnet, 2022; UK Government, 2023a). At the same time, poultry consumption has increased considerably over the past five years with a particularly steep increase over the past three years.

There is also a marked increase of high intensity meat production facilities in the UK. This trend to high intensity livestock farming has strongly increased over the past decade, partially reflecting consolidation within the meat industry. In certain regions of the UK permits for such operations have multiplied many-fold within less than a decade (Bristow, 2017; Stephenson, 2017). Such operations in the US are sometimes called mega-farms which are according to US definitions operations holding more than 125,000 birds reared for meat, 82,000 egg-laying hens, 2,500 pigs, 700 dairy cows, or 1000 beef cattle. In England the number of such high intensity operations has increased from 818 in 2016 to 944 in 2020. Of these, 745 house poultry and 199 are for pigs. Currently there are four poultry farms in the UK registered for 1 million birds, with the largest with up to 1.4 million. For pigs, the biggest three farms hold more than 20,000 pigs (Colley & Wasley, 2022).

"It is also the case that anticipated price increases in the agricultural sector is driving a lot of investment -- more so than in the past, and an acceleration of large scale farming at the expense of family farms." Expert: Academia

Apart from changing consumer choice affecting the meat industry, there are indications that internationally regulators will actively restrict high intensity meat production in the future, mainly for environmental reasons (despite resistance by farmers and the meat industry). For example in Spain new legislation is currently restricting the number of livestock farms in some areas and limits the number of animals that can be held per farm. Government initiatives in the Netherlands are aiming to reduce high-intensity livestock farming considerably over the next decade (Levitt, 2021; Munro, 2023). It remains to be seen whether these regulatory trends will impact meat price and consumption trends in the future.

Although Stewart et al 2021 that reported a decrease of 17% in red meat consumption in the UK between 2008 and 2019 based on self-reporting, found no correlation between household income and the reduction of red meat consumption, it is very likely that increasing production of cheaper meat (mainly poultry) is also linked to changes in consumption patterns due to a longer-term trend of increasing food prices in the UK. Moreover, data from January 2023 indicate that 1 in 5 consumers are currently cutting back on meat consumption due to high prices (Corbin, 2023; Stewart et al., 2021).

Hence, the progression, size, and dynamics of consumer trends regarding meat choices and consumption patterns may become more difficult to analyse in the near future due to shifting choices between different types of meat and the impact of economic pressures.

3.2.3 Meat alternatives

A growing market of plant-based meat alternatives is often taken as the most visible expression of consumers intending to consume less meat. In particular, record investments, including by large food manufacturers, in meat alternatives during 2021 established meat alternatives as a trend to follow with respect to consumers making increasingly healthy and sustainable choices. Many producers of plant-based meat alternatives could in the past few years rely on large amounts of investment capital, in particular during the Covid-19 pandemic, while scaling their operations. Globally, in 2021 plant-based meat, seafood, egg and dairy companies secured £1.04bn of investments, fermentation companies producing alternative proteins £1.27bn and cultivated meat companies £1.04bn (Ridler, 2022a).

However, during 2022 and 2023 several plant-based meat alternative producers made considerable losses after the pandemic subsided, and products need to stand the test of consumer acceptance and markets (Coyne, 2022). Moreover, there are evolving image issues around a perception of meat alternatives being highly processed foods and even for being negatively perceived by some consumers as ‘woke’ products (Creswell, 2022).

Increasing volatility of a trend towards meat alternatives may also be reflected in recent consumer tracking data published in February 2023. Although 32% of respondents reported that they eat meat alternatives, 21% responded that they have eaten such products in the past but no longer do and 39% had never eaten meat alternatives (Armstrong, King, Clifford, Jitlal, Ibrahimi-Jarchlo, & Mears, 2023). Hence, after the high-profile reporting on meat alternatives over the past five years it is likely that the forecast growth rates of plant-based meat alternative products might not be realised once novelty has worn off for curiosity consumers and if perceived quality as well as image issues are not addressed by producers.

It is also increasingly acknowledged that plant based as well as lab grown meat products would require updated regulation with regards to standardised ways for assessing health and sustainability claims to enable informed consumer choice (E. Lewis, 2022). While a study from early 2022 reports that around a third of UK consumers would try lab grown meat and a quarter insect based products, knowing that they are safe to eat, it is currently not clear to what extent consumers will in the near future be influenced by recent estimates, of how lab grown meat and alternative protein food products support global sustainability (FSA, 2022b). Even very optimistic estimates predict that these technologies could only supply around 5% of global protein by 2030, which may in the future lead to a decline of interest by consumers in these technology driven food choices, in particular as “naturalness” of food remains for consumers a highly rated quality (Jordan, 2023; Siegrist & Hartmann, 2020). Hence, it is likely that a more realistic understanding of what can be achieved in terms of sustainability and health with these products may make them less attractive to some consumers, and overall market growth rates may be lower than was anticipated in the recent past.

With respect to claimed or perceived health benefits of various meat alternatives, it appears that the products on the market can vary considerably in their potential health benefits, and a number of studies have shown that they may in fact have negative heath impacts by being high in salt and sugars while low in desirable micronutrients. Thus such alternatives may in the future be perceived increasingly as highly processed foods, (Ettinger et al., 2022; Tso & Forde, 2021; van Vliet et al., 2021). These issues make a slowdown or change of direction of trends in the meat alternative market likely in the short-term future.

“We are only at the beginning of the curve to people's awareness of different food choices and the impact of those choices.” Expert: Food Industry

3.2.4 Regulation attempting to influence consumer choice

With regards to promoting changes in consumption patterns through top down regulation with population health goals in mind, it has been recognised that some government measures such as the UK Soft Drinks Industry Levy (“sugar tax”), an industry re-formulation tax, can indeed impact health outcomes positively when introduced at producer level (Rogers et al., 2023). To what extent measures to reduce consumption of foods high in fats salts and sugars (HFSS) through the suggested restrictions on the advertising and promotion of volume sales of such food products will translate into behavioural change in consumers remains to be seen. As such ‘energy dense’ foods are often less expensive, the government has delayed implementation of some parts of legislation due to the current cost of living crisis until late 2023, but once implemented, impacts on population health might only become apparent over the next decade (UK Government, 2022).

Overall increased volatility of consumer choices is likely to persist into the short- to mid-term future making policy design and messaging to consumers more complex.