The Future Consumer – Food and Generation Z

FSA Research Report

February 2020

Background and objectives

This project is part of a Strategic Evidence Programme which addresses the FSA's cross-cutting and longer-term evidence needs. Since the FSA was established nearly 20 years ago, the food system has grown ever more complex and we have seen shifts in ways people access and share information about food, the way they group themselves, and in their trust and expectations of Government. Existing hypotheses suggests generational differences may become a more important influence on behaviour than socio-economic differences – and that Generation Z (broadly 16-25 year olds) appear to be connecting to food, to global systems, to information and to institutions in new ways.

In this context, the FSA commissioned BritainThinks to conduct research to improve understanding of Generation Z and their attitudes towards food and the food system, to provide a robust evidence base to inform strategic planning, policy and communications.

The research set out to explore:

- Understand how 16-25 year olds engage with information about food and the food system, and how they share information
- Understand how 16-25 year olds make decisions about the food they buy, and how they communicate about food
- Understand how 16-25 year olds feel about the food system, including the values, hopes and concerns that they have about the current food system and in the future
- Determine how 16-25 year olds differ from other consumers in their food attitudes and behaviours, and how they differ from young people of past generations
- Examine any sub-groups within the 16-25 year old age group, to understand how socio-economic background, gender or other differences may influence views

Overview of methodology

There were three stages to this project, firstly a Rapid Evidence Assessment (REA) overview; the full report has been published in parallel to this report. Secondly, qualitative research which included an online community over two weeks with forty participants who were also asked to take part in deliberative focus groups over the course of the exercise, and to take part in a follow-up session. This was supplemented by ethnographic interviews with five participants. As part of the qualitative research we tested three various potential future scenarios with participants, based on the Foresight report: Delivering on EU Food Safety and Nutrition in 2050 – Future challenges and policy preparedness.

Thirdly, the hypotheses developed during the REA and the qualitative groups were tested in a UK representative survey (n.2500) with an upweighted sample of people between 16-25.

More detail can be found in the accompanying technical report.

Stage 1: Refining the brief

Rapid Evidence Assessment

- To cover existing academic and grey literature on Generation Z and food

Internal workshop

- Debrief REA findings and agree themes for primary research

Stage 2: Understanding the audience

- 40 participants selected to undertake 4 phases of qualitative research
- Online community (split over two phases) - two weeks in total

Deliberative focus groups (split over two phases, 8 groups per phase)

- 90-minute groups
- 5 participants selected to undertake filmed ethnographic interviews
- 3 hour filmed interviews

Stage 3: Quantifying results

Nationally representative poll with boosted sample of 16-25 year olds

- Sample of 2,475, with total sample of 619 x 16-25
- To quantify findings and gain insight into how Gen Z compares to the wider population

Key findings

- Gen Z's food behaviours are strongly influenced by life stage and socio-economic background. Those who are still living at home tend to have less control over and engage less with food choices. Meanwhile, students and those in work are more engaged because they are budgeting and planning their own meals.

- Gen Z, alongside Millennials, are among the most likely to eat no meat or to be reducing their consumption of meat. They are also most likely to cite environmental concerns as the reason for this.

- Price is a stronger driver of food behaviours for Gen Z than for older generations. As such, despite being more likely to feel strongly about environmental or welfare issues, Gen Z are less likely than older generations to be 'ethically-conscious' consumers.

- Aside from a minority of 'conscious consumers', Gen Z have low awareness and understanding of food system issues. The knowledge that does exist is often patchy – picked up from encountering viral content on social media, most frequently on the topics of plastics and animal welfare.

- Thinking about the future, Gen Z care most about the environmental impact of food, and least about the global nature of the food system. Gen Z believe technology will be key to delivering the food quality, variety and value they enjoy today, with less harmful impacts. They also feel negative about the involvement of large corporations and monopolies in the food sector.

Rapid Evidence Assessment findings: theories about Gen Z

Multiple sources about Gen Z reviewed in the REA focus on the impact of being the 'social media generation'. Gen Z are often defined as the first true 'digital natives', marking them out as distinct from previous generations, in terms of their attitudes, identity, and behaviours. Brands have generated a lot of 'hype' about Gen Z as digitally native, and their main interest is in Gen Z's online lives, thinking about this from a marketing perspective. Beyond this, the association between Gen Z and tech leads to somewhat negative stereotypes – that they are wedded to social media and technology, obsessed with and anxious about their online image, – overly emotional, with an inflated sense of uniqueness and entitlement, and lazy and irresponsible.

In addition to tech, theories about Gen Z are linked to the circumstances in which they have grown up, citing the financial crisis and austerity, the gig economy, the rise in tuition fees and concerns about climate change which have led to them often being called 'Generation Sensible'. This is primarily associated with reductions in risky behaviours such as drinking and drug taking and their inclination to save rather than spend money.

The REA found strong evidence that Gen Z are spending more time online; and are more likely to report mental health issues. They have a strong sense of social responsibility, and care about the environment, and have a more international outlook than previous generations. A more ‘fluid’ generation, they are less likely to identify as heterosexual and or with gender binaries. They value individualised and unique products, though they prefer experiences to material goods.

There is work to be done in deepening understanding of this generation as current evidence is thin. The bulk of information published on this generation is grey literature, and tends to have a branding and marketing focus, tending towards generalisation and overclaim. Few peer-reviewed studies and longitudinal sources are available and very little attention is paid to the extent to which findings are a ‘cohort effect’ (i.e. a phenomenon particular to a generation), a ‘period effect’ (i.e. is this shift happening to everyone) or a ‘life-cycle effect’ (i.e. have young people always been like this?). Findings about consumption trends come entirely from grey literature, and most of the research focuses on stated preferences rather than reported or actual behaviour.

Meanwhile, Gen Z feel misrepresented by blanket claims. According to a survey of 2,000 British adults, 74% of 18-24-year olds say they feel young people are misunderstood. Stereotypes about Gen Z are reductive, rarely underpinned by evidence, with robust data in short supply.

The REA found very limited evidence about Gen Z and food, but existing data shows that Gen Z have a typical teenage diet. Gen Z are perceived to have embraced meat-free diets more than older generations, including Millennials. However, there have been three UK-based surveys on rates of vegetarianism and veganism by generation which show that the number of vegetarians and vegans is growing rapidly, and all surveys show the number of Gen Z vegetarians and vegans being in line with those of Millennials. Between 1-5% of 16-25 year olds have been reported as vegan and 5-12% are vegetarian, but current evidence about the motivation behind veganism and vegetarianism is inconclusive. Although it is widely reported that Gen Z are leading the vegan and vegetarian movement, this does not appear to have translated into their consumption behaviour.

According to the FSA’s Food and You survey, those aged 16-24 years old are the least likely to say they eat fruit and vegetables and show higher consumption of fast foods and takeaways. However, evidence suggests that this is due to life stage, rather than being a cohort effect. Making ‘healthier’ food choices generally increases with age, as people become more health conscious and have higher incomes. An absence of longitudinal data examining food consumption makes it difficult to assess whether these are true generational differences.

Insights from our qualitative and quantitative research

In many ways Gen Z are just like young people in generations before them. They are focused on the next immediate milestone and find it difficult to look ahead to the medium/ long term. They are interested in trying new things and feel they are more accepting of difference than older generations. They are still at a point of flux in trying to understand what they believe and what they want in life. This means they often don't have strong views; they are still deciding what they believe in and they have their minds on their immediate concerns rather than on 'big issues' facing society.

> "I worry in the short term about deadlines and having an essays, to be honest that's one of my only worries." (Cardiff, 20-25, ABC1)

> "I'm looking forward to going to uni and meeting new people. I also hope to go abroad and experience a new country." (Cardiff, 16-19, C2DE)

> "Me and Peter have very different views, but we respect that, and we get on alright" (Belfast, 16-19, ABC1)

Life stage

There is a great deal of variation within Gen Z, determined by their life stage, as well as their socio-economic background. We saw clear differences between those in school, between 16-19 years old, living at home with their parents, those in Higher Education, mainly aged between 19-25 years old, living in student accommodation or in the private rented sector and those in employment, aged between 19-25 years old, who can be either still living at home or living away from home with flatmates a partner, or children. Within each of these groups, socio-economic grade is a key driver of difference. Those from higher socio-economic grades tended to have higher starting levels of awareness and engagement with current affairs and more confidence in expressing opinions on political or social issues.

School

- Eat what your parents eat
- Main food choice is after school / fast food

"If it's your mum you are just going to eat whatever she prepares." (London, 16-19, C2DE)

University

- Starting to experiment and gain skills
- Learning to budget for the food shop

"At uni I've become more independent, learnt how to cook a lot of new foods rather than sticking to my staples." (Cardiff, 20-25, ABC1)

Working

- Established preferences and routine
- More practiced at saving money e.g. weekly food shop

"I plan all of our meals for the week ahead of time and make a big list on Sunday and then do the weekly shop. It saves us money to plan and it means I can relax in the evenings after work."

(Colne, 20-25, C2DE)

Those still at school are less engaged with social affairs and less confident in their own opinions. They are focused on exams and their friends. Current affairs feel removed from their lives, and are not something they talk about with friends. They are less confident in themselves and in their own opinions. They feel that there is still a lot they don't know, and they often feel ill-equipped to arrive at any conclusions. They tend to be living at home with their parents, who usually buy and prepare food for them on their behalf. The main food decisions they take individually relate to choosing snacks or when out and about with friends.

Those at university are gaining a wider set of experiences and gaining in confidence and skills. They are engaging with a wider and more diverse set of friends and are the most likely to be engaged with wider issues facing society, and the most confident in expressing opinions about these. At this stage, most have left the family home and are responsible for their own budgeting, food shopping and cooking. They are more engaged with their food decisions, but also still just getting used to this freedom. Most prioritise cheap and convenient food to fit around tight budgets and unpredictable schedules.

Those who are working tend to be more settled in their opinions and behaviours. This group are either living away from home with their flatmates or their partner, and are more settled in preferences and opinions, and confident in expressing these. They tend to be planning for the next five years. At this stage, they have full autonomy over their food decisions are are more settled in their food behaviours. They are more likely to have an established routine when it comes to food, with some describing regular weekly food shops and meal planning.

Social media

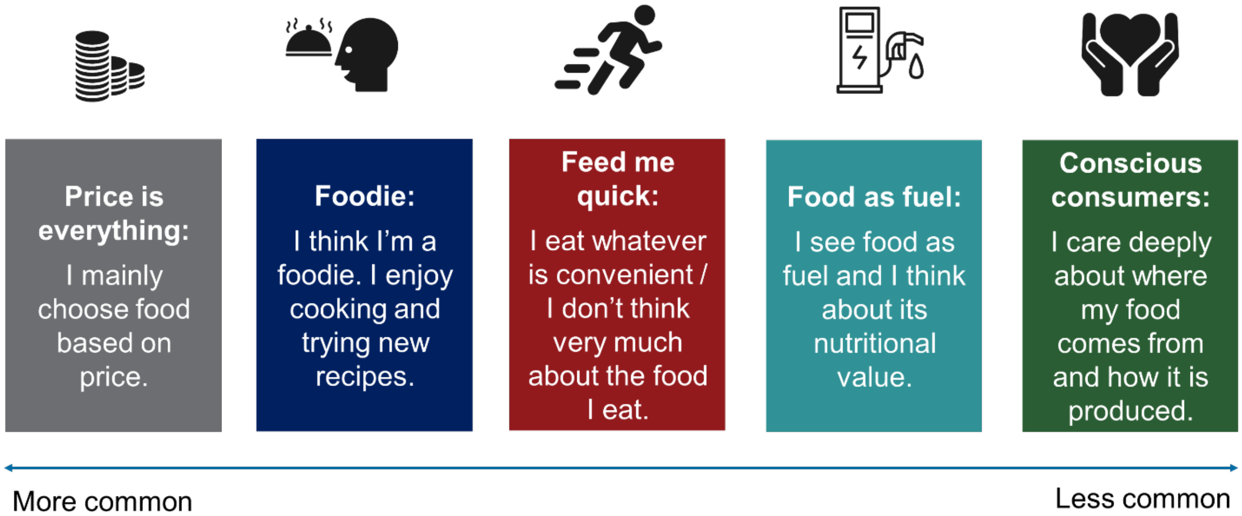
When asked what sets their generation apart, participants were most likely to say social media. Feeling the need to post online about what you're doing, your achievements and your feelings is something they recognise as being more prevalent amongst their age groups than older ones. Although many we spoke to said that they worry about their mental health, and see social media as a key driver of this. Several participants said they had tried or were considering cutting down on their social media use.

Concern about the future

Gen Z report high levels of concern about the future they face, but the most common reaction to this is hopelessness rather than activism. Although they have different starting points, nearly all reported a sense of overwhelming negativity when considering the future. Brexit, austerity, climate change and knife crime the most frequently cited issues of concern. The REA also identified a marked increase in pessimism among this generation. The dominant mood is apathy driven by a sense of powerlessness. While some spontaneously mentioned Greta Thunberg, most were sceptical about the power of young people to change the status quo.

Food personalities

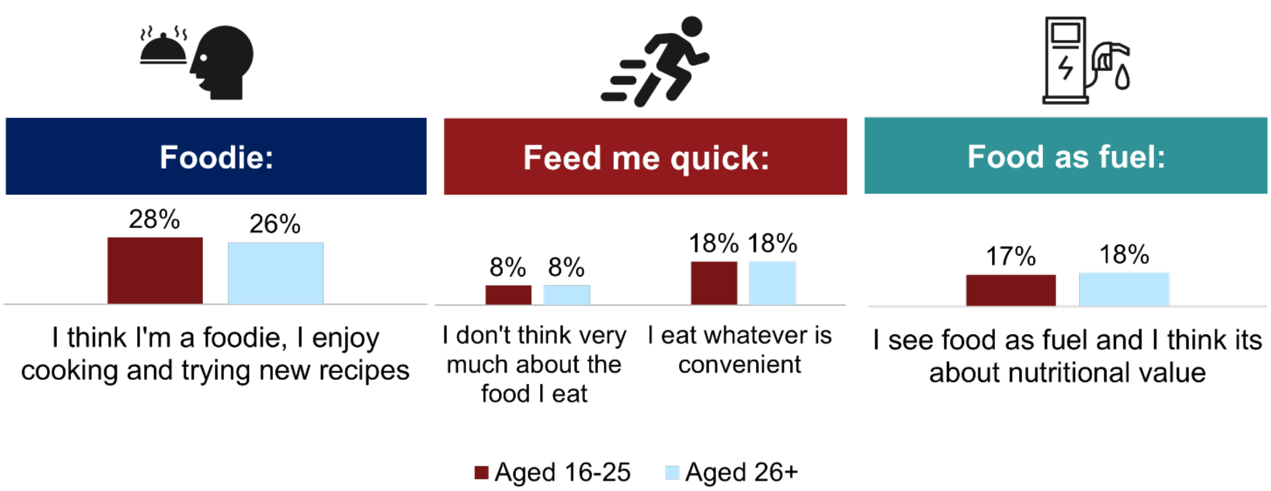
In the qualitative research, different food 'personalities' emerged, which describe different food priorities, values and behaviours.



Some of the Gen Z personalities described eating a lot of fast food and taking little interest in food. While budgeting on food was a priority for most of our participants, some found this much less of a sacrifice than others. These participants tended cook rarely, instead buying cheap convenience food; often eat the same foods habitually rather than trying new things, and eat fast food when eating out.

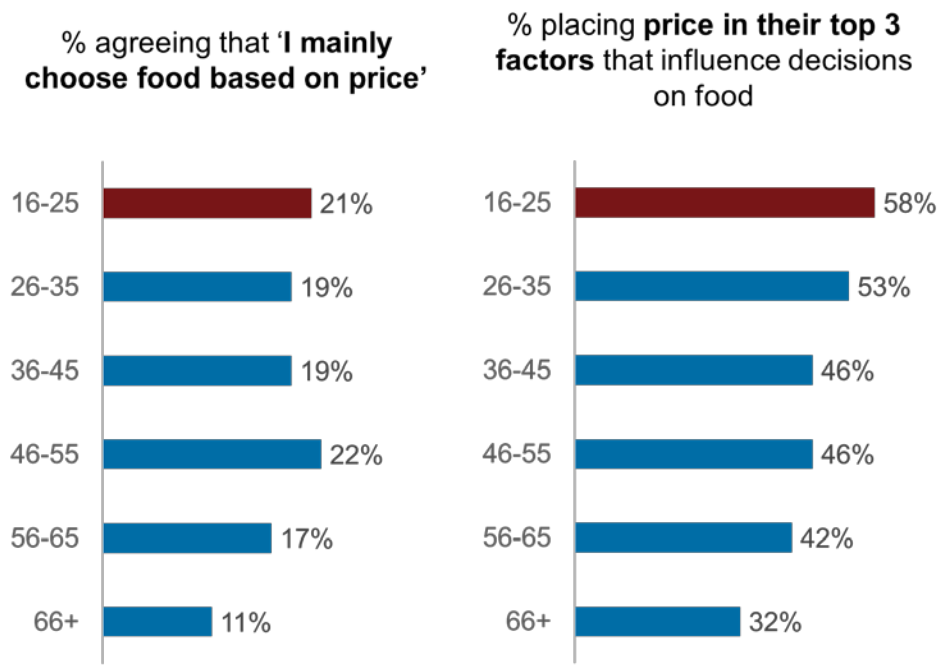
In contrast to those not thinking much about food, some participants see food as a priority and take a great deal of interest in what they eat. However, many of our participants were very different to the takeaway obsessed stereotype. They were thinking deeply about their food, either from a nutritional point of view or for pleasure. These participants tended to cook regularly, use social media to find new recipes / diets, eat out and try new places and to be very interested in exercise and fitness.

The survey shows that the variety of food personalities observed in Gen Z is broadly in line with the rest of the population.



Price Conscious

A key difference between Gen Z and older age groups is over how price conscious they are. This is most likely a life stage effect. Across the sample, our participants were engaging in price conscious behaviours, using vouchers, deals and student discounts, favouring budget supermarkets. The survey findings suggest that this a life stage effect, with price generally becoming less of a concern as people get older.



But not 'conscious consumers'

Compared to other cohorts, Gen Z are less likely to be 'conscious consumers'. Across all age groups, 'Conscious consumers' are more likely to be vegetarians or vegan, to claim knowledge about the food system, and to buy organic and pay attention to food labelling. Among Gen Z, conscious consumers are rare: in the qualitative research, most participants rarely gave much thought to where their food comes from. This may come as a surprise given the evidence about Gen Z's stated values about social issues and the environment – it seems this rarely translates into consciousness about the food system.

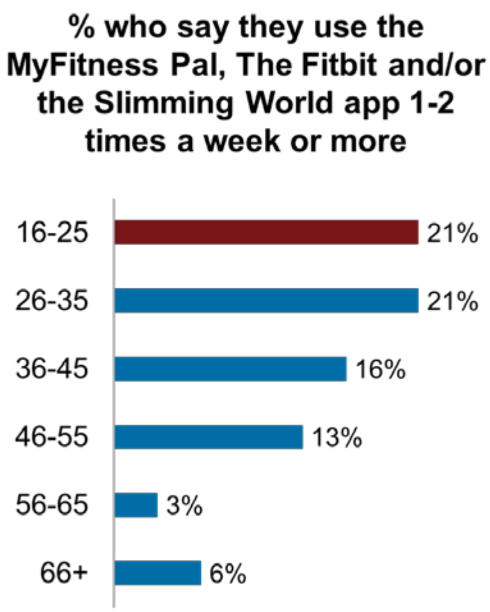
Food values versus food behaviours

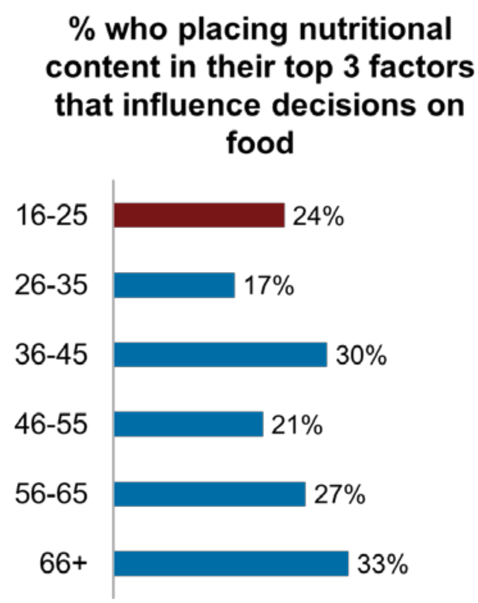
When it comes to nutrition, environment and ethics, Gen Z values are not always in line with their actual behaviour. FSA 'Food and You' data indicates that 16-24 year olds are the least likely to say they eat fruit and vegetables and the most likely to say they eat pre-packaged meals, ready meals and burgers. This is supported by the qualitative research in which participants were often choosing to eat fast food when out with their friends. This was most true of 16-18 years old for whom getting fast food with friends is an important part of socializing. Other consumers also recognise this pattern among Gen Z.

Health conscious

However the data suggests that Gen Z is also a health-conscious generation. Gen Z are more likely than Millennials to say they prioritise nutritional content and are one of the age groups most likely to be using fitness apps. This is in line with the findings in the focus groups and online community where we heard a lot of interest from participants in healthy eating, often being driven by social media and body image pressures. Some participants were also quite knowledgeable about diets and food

Many said that healthy eating was their main aspiration for the future when they think of food.





Environmentally aware but price driven

Gen Z think of themselves as an environmentally minded generation, even if this isn't something that applies to them personally. Our participants were aware of this narrative around Gen Z and said that they hear friends and family say that young people are eating less meat and that young people care more about the environment. Participants felt that they had noticed a difference between their generation and others when it comes to an openness to new ways of thinking about food, particularly around veganism and vegetarianism. Gen Z is slightly more likely to be buying organic, but is less likely to be buying locally produced food or food with less plastic packaging

In the qualitative we heard that participants regard these environmentally-friendly behaviours as out of reach for them at this point in their lives due to price pressures. However, the picture is more complex when it comes to other environmentally driven food behaviours.

Animal welfare was one of the few food system issues raised spontaneously by participants in the research. Many said they had seen information about this on social media, however, the quant data suggests that Gen Z are in line with the rest of the population in terms of level of concern over animal welfare. Gen Z see themselves as caring more about animal welfare than other age groups, but are less likely to be buying food that has been produced to high animal welfare standards than other age groups. This was borne out in the qualitative research, where most participants said that this was not something they were prioritising in their food decision making, despite being aware of the issues, again, this was often felt to be due to cost pressures making ethically driven choices more difficult.

Gen Z are more likely to be changing their behaviour around meat consumption than any other age group, and they are more likely to say they are doing this for environmental reasons. However, this is still a relatively small proportion of Gen Z, and should not be taken to mean that this is a trend that affects all of 16-25 year olds. Gen Z from higher social grades are twice as likely to be vegetarian / vegan than those from lower SEGs (12% ABC1 /6% C2DE) and female Gen Z are more than twice as likely to be vegetarian/vegan than male (13% versus 7%).

Participants in the qualitative research saw a clear trade off between price and healthy, environmentally friendly, or ethical food behaviours. Many expressed a desire to engage in these behaviours more in the future.

School

> “I care about how filling it is for the price…like bread rolls in supermarkets are good because they are often cheap and filling.” (London, 16-19, C2DE)

University

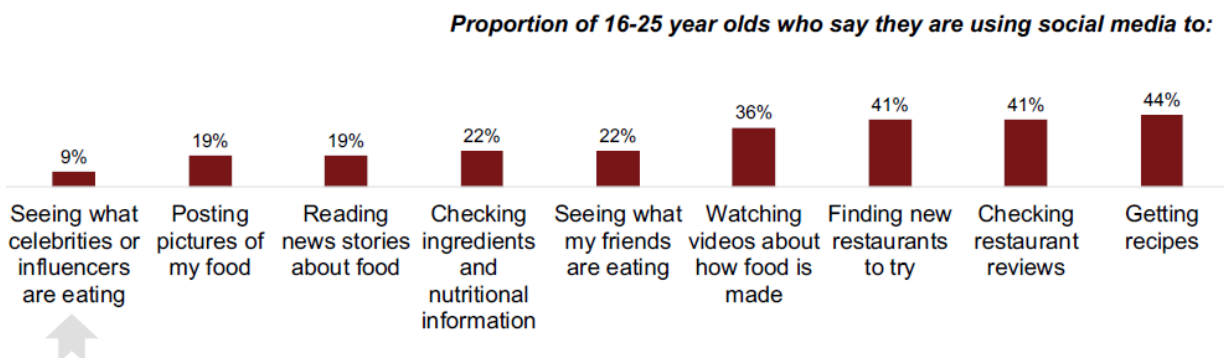
> “I don’t want to know more, because so much of the food probably comes from disgusting places. I can’t afford things that are really pricey and higher welfare.” (Cardiff, 20-25, ABC1)

Work

> "I feel like I always used to care about price and go for the cheapest option, but now I think more about where the food comes from and what effect it has inside your body and how it's been processed." (London, 20-25, ABC1)

Digital media and food

Gen Z spend significantly more time on food related activities on social media than other age groups, primarily using social media to get information and to engage in conspicuous consumption**.**



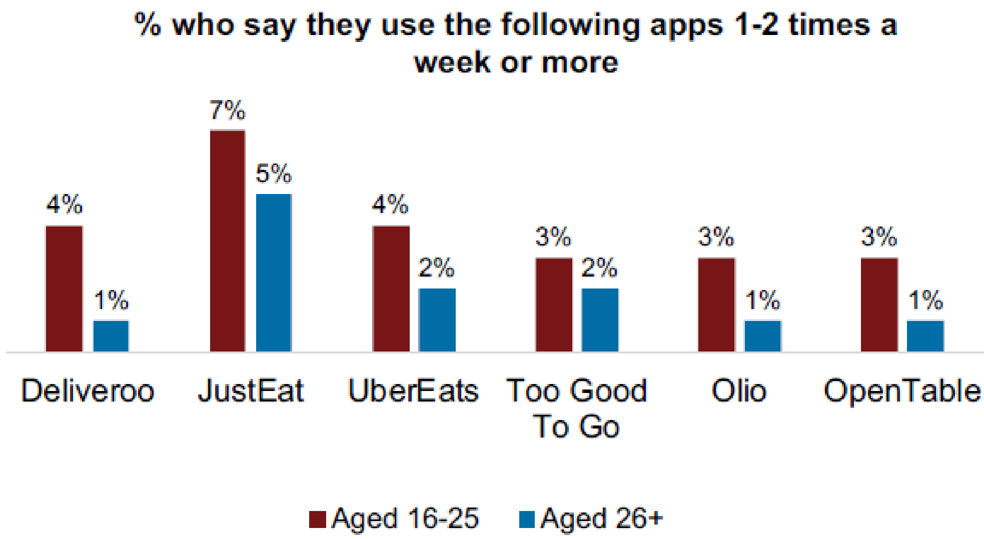
Where participants were following influencers who had a specific focus on food, they were more likely to have engaged with food as a topic in and of itself.

Gen Z are not engaging with news stories about food more than other age groups. This is striking given the perception of Gen Z as an engaged, socially conscious generation, as well as being 'digitally native'. In the qualitative research participants spontaneously shared stories about recipes, socialising with friends and following celebrities, but rarely shared any news stories about food. Despite them not proactively seeking out this information, their use of visual platforms means they are more likely to be seeing 'viral' content.

Gen Z are not using food related apps more than any other age groups

Food delivery apps were seen as a luxury by participants rather than something they use all the time. There was little demand for personalised services from participants

Few had used any recipe or ingredient delivery services and most saw this as out of reach for their budget.



The food system

Gen Z are less likely to care to be worried about importing food from abroad and less likely to be worried about food safety and hygiene. In the qualitative research, participants showed a high level of spontaneous trust in the regulation of the food system, and therefore did not see food safety and hygiene as an issue of concern. They also do not see the importing of food as an issue in and of itself, although they do worry about the impact this has on the environment.

As with consumers in general, Gen Z are rarely thinking about the system behind food production. Participants said they take the system of production and processing for granted, as food is readily available, decision-making around food is often habitual and it is not a topic of discussion with friends/ family. However, the survey shows that Gen Z are slightly more likely than older generations to claim knowledge of the food system. This may be a life stage effect e.g. they are possibly more likely to have learnt about this in school recently, or it may also be related to increased exposure to food system issues through social media. Gen Z's knowledge of the food system is patchy – they are engaging with 'trending' issues rather than the system as a whole. Where they have engaged with food system issues, this tends to be through school, social media or their peers. They will often have knowledge of one quite niche topic but lack the wider context to that issue e.g. knowing that cows 'fart' but not understanding the pressure livestock production places on natural resources.

Animal welfare

> "Animal welfare is still not up to the standards that it should be. In particular, the welfare of chickens in industrial farming." (Cardiff, 20-25, ABC1)

Plastic

> "Recently I have been aware of the amount of plastic packaging that is produced to keep our food in. Plastic can hurt animals, I think this is an important issue." (Cardiff, 20-25, ABC1)

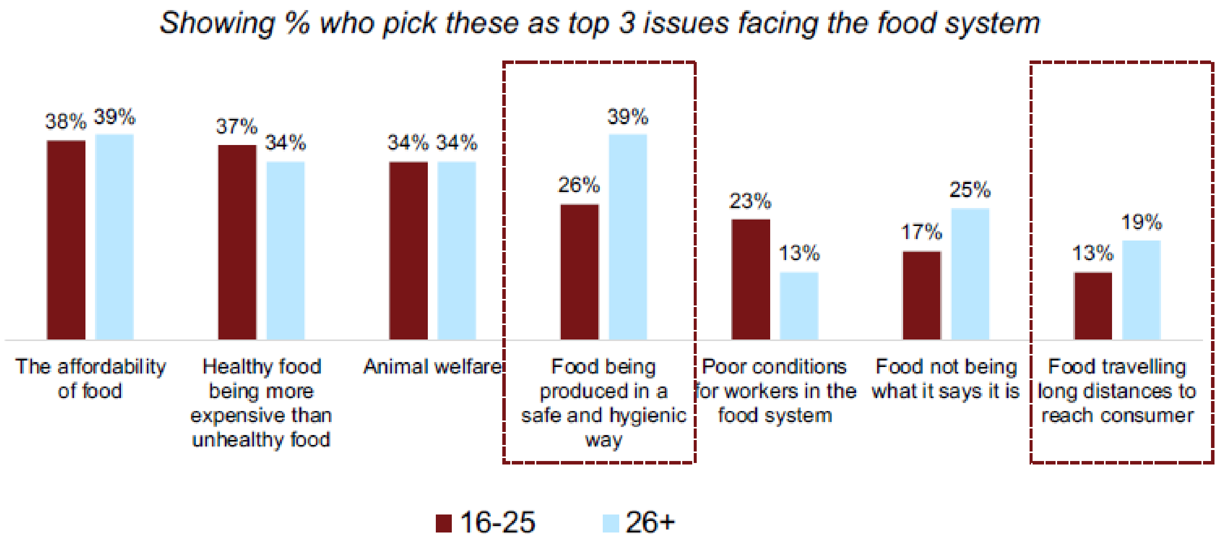
Health

> "I read an article on the BBC about a young boy who has gone blind from eating junk food every day. It goes to show how important following a healthy balanced diet is!" (London, 16-19, C2DE)

Hygiene

> "I have seen numerous videos on social media that have shown factories dropping chicken on the floor and picking it back up, pumping the chicken up with various fluids." (London, 16-19, C2DE)

The quant data suggests that Gen Z are more likely to care about the environmental impact of food than other age groups. Older Gen Z and those who identify as 'conscious consumers' tend to have higher levels of knowledge of food system issues. The qualitative findings suggest this is more of a vague concern rather than an informed understanding of the issues. Most said they had never thought about climate change in the context of the food system before. While there was awareness that meat production has an impact on the environment, the underlying reasons for this are not well understood. Beyond this, participants struggled to name any other food related environmental issues apart from plastic packaging.



Global food security and the environment

Much of the information provided on the environmental impact of food production was not previously known to participants e.g. impact on resources, water and biodiversity. This information tended to have a big impact on participants, with many focusing their independent research on this topic. Participants were particularly concerned about food security which they had never considered in the context of the UK before. Some felt that the challenge is around distribution rather than production

Complex food supply chains

There was high awareness that food travels around the world and awareness of prominent food crime cases, such as horsemeat. Very few were concerned about this and indeed many saw advantages to consumers, including more choice and convenience, with a strong system in place to protect them as consumers. However, some did feel that the amount of food the UK imports is surprisingly high and felt that in future it would be good to rebalance this.

Affordability and access

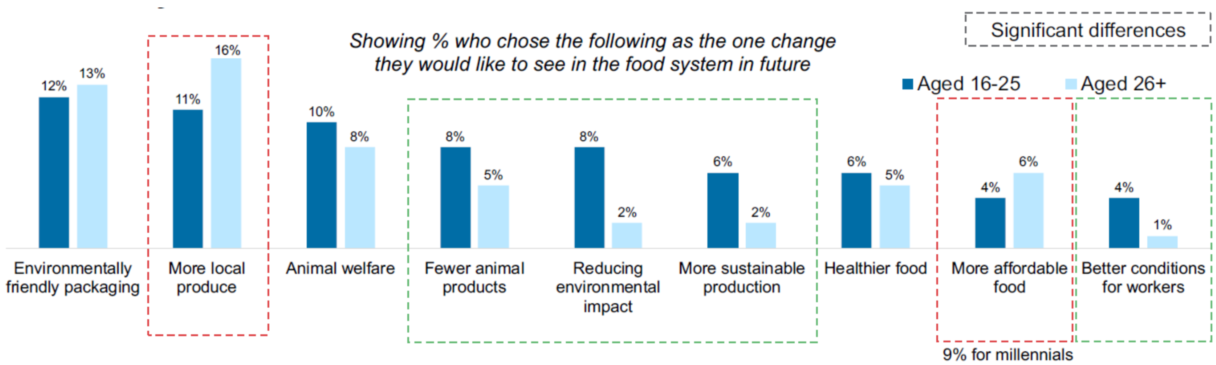
This was an issue that participants felt personally familiar with, having noticed the difference in price between healthy food and junk food. However, there was still surprise at the extent of inequality in the food system. The term ‘food desert’ was not one that many had heard before but for some it resonated as something they recognised, and felt strongly about. The information had a big impact on participants with many coming to see this as an important social issue which they think should be prioritised in future discussions about the food system.

The impact of participation

Learning about the food system made participants more engaged but didn't trigger any significant changes to behaviour. Between the first and second set of focus group sessions, participants became noticeably more engaged in the research

Many went above and beyond in what was asked of them in their independent research task. The food system challenges that resonated the most were the environmental impact of food production, which is not just limited to meat, animal welfare being compromised in order to produce cheap food, and the high cost of healthy food that is unaffordable and inaccessible to some people on lower incomes.

In the survey we asked what one change Gen Z wanted to see in the food system in the future**.**



Future scenarios

We tested three various potential future scenarios with participants, based on the Foresight report: [Delivering on EU Food Safety and Nutrition in 2050 – Future challenges and policy preparedness](#).

Attitudes to technology

In the focus group discussions, Gen Z spontaneously identify technology as key to addressing the challenges of the future food system. There is a strong feeling that technology will play an important role in responding to the problems currently facing the food system. Whilst actual knowledge and awareness of specific technologies was low, Gen Z showed an openness to accepting these technologies, even where trade-offs were highlighted. There is also a belief that the prevalence of vegetarianism and veganism will increase, with people generally eating less meat. Despite Gen Z being so price-driven, cost and affordability do not emerge as the highest-ranking future priorities. This could in part be because they hope they will be able to buy ethically and sustainably in future.

Technological solutions feel plausible and sensible to Gen Z, matching their assumption that technology will play a significant role in the future, Powdered, functional foods are well-recognised among Gen Z – so an intuitive way to increase production, reduce waste, and to improve overall population health. There was some concern about processed foods and their unknown and unintended consequences, and minor resistance to the idea of food being purely functional and the loss of connection, balanced by an intuitive sense that technology will make food production quicker, easier, and more environmentally friendly. Interest was sparked by modern, sustainable farming techniques e.g. vertical farming, but there was some concern about the unintended consequences of technology e.g. GM, and the impact of this scenario on the livelihoods of farmers. There was some openness to eating insects or lab-grown meat in absence of alternatives, though this varied widely. ‘Conscious consumers’ were more likely to eat lab-grown meat than animal meat, but others feel uncomfortable, want choice, and feel they would need to be strongly ‘nudged’, showing a preference for natural over ’fake’.

Local and regional food production

Local and organic produce is supported primarily due to environmental benefits, sustainability and healthiness, and there was some sense that this scenario would also have a positive impact on local economies. It felt like an idyllic and nostalgic scenario and there was a recognition that this scenario would not be able to accommodate current lifestyles and deliver the level of choice and convenience that they have grown accustomed to. In contrast to discussions with older consumers, there was very little desire to realise this future – reflecting the lower interest in ‘local produce’ in the survey. No one in the deliberative discussions thought this would work for them or their household, and certainly not in cities. Overall, this scenario was felt to be unrealistic in terms of the time, space and expertise needed to produce enough food locally While more local food production is seen to have benefits, it is recognized as unrealistic, a ‘step backwards’, and unfair to those without the skills, time or resources to grow food. It also represented an unacceptable curb on consumer choice.

Global food

Gen Z like the idea of affordability, choice and convenience this scenario would offer – these are allattributes they value now, but this did not outweigh the expected negative impact on health (due to proliferation of cheap, unhealthy foods) and the environment. Gen Z are mostly unconcerned about the global nature of supply chains – complexity is not a high priority issue. Gen Z are distrustful of the profit-led motivations of large corporations and their lack of transparency. They express concerns about small number of big businesses having control over the entire industry, and this leading to monopolies and an increase in prices. On the other hand, fewer players involved made some think that regulation of the food system might be easier in this scenario. Some like the level of innovation they feel would be encouraged as part of this scenario, but ultimately Gen Z see this as an unsustainable, short-term solution, with long-term negative impacts on the environment and the overall health of the population.

Preferences and expectations about the scenarios are relatively consistent across locations and typologies – yet there are key differences in terms of how much Gen Z expects consumers will change. Overall, there is a strong sense that convenience and choice should be maintained, and willingness among some (especially conscious consumers) to change diets, shift to more functional food systems, seeing technology as a sensible and largely acceptable pathway. However, Gen Z want to see strong checks on the powers of large monopolies in the food system.

Amongst Gen Z there is a sense that consumers, including Gen Z, have limited power to change to the food system. They do not have the necessary knowledge or spending power, and see limited impact of consumer decisions. Gen Z recognise that consumers (including them) will want to preserve choice and convenience, and instead, they want to see the Government take greater responsibility for driving positive change by increasing awareness and education around the issue, and bringing in strict standards and increased regulation to curb the power of large corporations.

Gen Z's spontaneous priorities about the food system are about the environment, animal welfare and better packaging. As they learn more, they most prioritise the affordability of and access to healthy food, to avoid two-tiered food system, education for consumers to make informed choices – though recognising the limits of consumer influence, continued convenience and choice – once they realise this is at risk, and sustainable and environmentally friendly production – based on a new understanding of how the environment is connected to food beyond meat production.