ProFSET
Professional Food Science, Engineering and Technology Group

# ProFSET Workshop 2025
# Introduction, Summary & Outcomes

## Introduction

On 15th July 2025, the Department for Environment, Food & Rural Affairs (DEFRA) published a Policy Paper "A UK government food strategy for England"- Towards a Good Food Cycle: a UK government food strategy for England, considering the wider UK food system (https://www.gov.uk/government/publications/a-uk-government-food-strategy-for-england).

Many organisations representing private sector industries active in the UK Food Chain have already responded.

At their November 2025 workshop, ProFSET explored the actions necessary to achieve the 10 recommended Outcomes of the DEFRA Policy Paper.

The ProFSET organisation is unique, since it represents members of the professional scientific bodies within the UK, operating within the UK Food Chain.

The ProFSET website is:

https://www.nottingham.ac.uk/science/schools-centres-and-institutes/food-systems-institute/professional-food-science-engineering-and-technology-group.aspx

Its contribution is therefore unbiased and its members represent our national high-level expertise in all the science and technologies relevant to our Food Chain.

ProFSET's detailed recommendations for actions to achieve each Outcome are presented in this report, and on its website. An overall summary is given below.

# Summary

The Outcomes of the policy document identify the need for safe, healthier, and appealing food to be delivered to consumers at acceptable cost. At the same time, the Food Chain should become more environmentally sustainable. These are complex challenges and ProFSET recommends that tighter definitions are available and should be established if targets are to be met. Control of these factors will be improved if local and regional food production is strengthened since the UK already sets high standard of safety.

Whatever detailed targets emerge, the solutions will be via **innovation** throughout the Food Chain. As our detailed responses to the Outcomes show, in some cases technologies are already available; for others **Research and Development** is required. What is true for all cases is that **innovation** will only be successful by collaboration of food producers and the acceptance of novel science and technology by the consumer.

The UK has an excellent science base in modern biology relevant to human nutrition, and in novel engineering technologies for production, but these are slow to transfer because of limiting capital for scaleup, and poor communication between experts and private sector practice. To stay abreast of world competition, even at local and regional levels, R&D must be maintained by education and training at a world class level. However, to create growth, communication to business must be improved. These requirements are the responsibility of both Government and the private sector.

Members of Professional Bodies are the custodians of existing knowledge and leaders of R&D and innovation. Their knowledge of biology relevant to food materials and human nutrition, and the physics, chemistry and engineering of food needs greater coordination and dissemination if they are to maintain the national capabilities and to engage in technology transfer. ProFSET will play its part in knowledge integration, and also recommends that more regional Centres of Expertise need to be established, coupled to academic research, where advice on both novel production methods and optimum dietary consequences is available. This is needed urgently by startups and SMEs with ambitions to grow, and by existing businesses struggling to survive. These regional centres should also increase awareness of the expertise and excellence of our existing national capabilities, raising the profile of employment within the Food Chain.

Sustainability implies the sharing of best practice from “Farm to Fork” and by consumers themselves. In response to all of the Outcomes, it was recognised that the internationalisation of food supply has decoupled the consumer from production, leaving them suspicious of novel practices - even to the point of blaming the supply chain for poor health. This has been amplified by inaccurate opinions circulating in social media concerning “Ultra Processed Food”. It is **vital and urgent** that validated information on healthy **diets**, and the **benefits of novel formulation and processing** is available in a language suitable for education in schools and adult education. The professional bodies are already active in debunking myths, and ProFSET will attempt to coordinate their multiple outputs.

National sustainability and self-reliance can be improved and regulated by enlargement of national supply chains, at regional and local levels. However, this needs investment in capital, **and** the human skill base, since it needs to compete with the costs and efficiency of large-scale international production. Modern technology can produce an innovative and flexible supply chain, and this competence can attract inward investment. In contrast, if our current excellence in the science and technical base of food safety, manufacture, and nutrition declines, then so will a key national industry. This represents a serious risk to national welfare.

Finally, while the Workshop focussed on DEFRA's recent document, it becomes obvious that this single Department cannot implement all the required actions to achieve its objectives. Collaboration will also be necessary with:

- Department for Science, Innovation and Technology
- Department for Education
- Department of Health and Social Care
- Department for Business & Trade

# Actions on Outcomes
# Recommendations from the ProFSET Workshop

## Outcome 1. An improved food environment that supports healthier and more environmentally sustainable food sales

### To achieve Outcome 1, it is essential to establish clear and concise definitions for both "healthy food" and "sustainable food product".

There is currently significant confusion and misinformation surrounding ultra-processed foods (UPFs), largely driven by social media narratives and influencers. This misinformation often oversimplifies complex nutritional issues. To counter this, the focus should shift from narrowly defining "healthier food" to promoting a "healthier overall diet" considering balance, diversity, and long-term well-being.

Furthermore, understanding consumer perceptions of what constitutes a sustainable food product, and whether that product will remain sustainable in the future (sustainability proofing), is critical. We need to ensure that sustainability claims are robust, transparent, and adaptable to evolving environmental and social conditions.

### To achieve Outcome 1, a Food Systems approach is needed.

Health and environmental sustainability are deeply interconnected. These dimensions are complex, interdependent, and cannot be addressed through isolated measures. Therefore, adopting a Food Systems approach, rather than implementing a single policy, is essential to deliver integrated solutions that consider production, consumption, and societal impacts.

We can leverage the following areas to drive meaningful change:

- Learn from previous interventions that successfully shifted consumer behaviour toward healthier and more sustainable food choices.
- Collect and analyse data to enhance awareness and transparency regarding the nutritional, environmental, and social impacts of food.
- Engage with consumers and advocacy (pressure) groups to ensure policies and innovations align with public expectations and needs.
- Review and simplify ("deconstruct") existing regulations while maintaining uncompromised food safety standards.

### To achieve Outcome 1, we need to strengthen the scientific and technological foundations.

From a scientific and technological perspective, ProFSET members already possess the expertise and "know-how." The next step is to identify and strengthen the fundamental science, ensuring that innovation is evidence-based and scalable.

### To achieve Outcome 1, targeted industry incentives are recommended.

Ultimately, there should be incentives for industry to produce healthier foods, supported by clear guidelines for responsible consumption.

A critical question remains: Can government help offset the cost of healthier options? Doing so would keep prices affordable for consumers and ensure equitable access to nutritious food.

## Outcome 2. Access for all to safe, affordable, healthy, convenient, and appealing food options

### To achieve Outcome 2, we need alternative food production models.

To transition toward a more resilient and sustainable food system, we need shorter, localised production models that reduce reliance on conventional large-scale, globalized industrial supply chains.

This will involve:

- Reducing geographical and relational distance between producers and consumers.
- Minimising intermediaries in the supply chain to improve transparency and fairness.
- Developing a clear understanding of when local supply chains outperform international ones, and vice versa, based on environmental, economic, and social criteria.

### To achieve Outcome 2, we need a better definition and understanding of Ultra-Processed Foods (UPFs).

There is an urgent need to:

- Establish a clear, workable definition of UPFs and develop metrics to measure their impact on public health (currently absent, only speculative).
- Differentiate between UPFs and fortified foods, as fortification plays a key and positive role in nutrition.
- Explore strategies to make healthy options appealing and accessible on popular food delivery platforms such as Deliveroo and similar services.

### To achieve Outcome 2, we need affordability and nutrition for people living in poverty.

Ensuring affordable, nutritious food for people living in poverty must remain a priority. This requires coordinated efforts between industry, government, and civil society to address cost barriers without compromising quality.

### To achieve Outcome 2, education should be prioritised.

- Reintroduce food literacy into school curricula, equipping future generations with knowledge about nutrition, sustainability, and food systems.
- Promote the principle that everything can have a place in the Eatwell Guide, while emphasising shared responsibility with consumers as well.

### To achieve Outcome 2, investment in research and innovation is needed.

Collaboration with Research Councils is essential to direct investment toward:

- Developing foods with balanced macro- and micronutrient profiles.
- Advancing innovations that align health and sustainability goals within a food systems framework.

## Outcome 3. Conditions for the food sector to thrive and grow sustainably, including investment in innovation, and productivity, and fairer, more transparent supply chains

### To achieve Outcome 3, Investment is needed for growth.

There currently exists a huge imbalance in investment, incentives, and subsidies for this critical sector which feeds our nation.

We can wait a few weeks for a new car, but Covid-19 clearly showed us that we cannot wait even a few days for food!

Investment in the food sector will support several substantial Government objectives:

- Increase UK productivity, exports, and investment in science, technology, and innovation.
- Increase UK food security, and drive sustainability.
- Invest in all people, at every level, in every UK region as per The UK's Modern Industrial Strategy 2025 objectives.

Investment in Food R&D technology centres will create new AI pathways adopted by large businesses which, in-turn, will roll out and filter through to the rest of the food sector.

Increased flexibility and funding from UKRI and Innovate UK is needed for projects which can make transformational positive change to the structure of the sector.

## To achieve Outcome 3, the Food Sector requires a pre-competitive Food Innovation Centre in every UK region.

Expansion and scale-up of NPD is a minefield for SMEs. Expert knowledge and experience can help businesses invest in the right things in the right way.

Examples of guidance can be, but are not limited to:

- Technical: Legislation, IP, food safety, quality control and digital technology adoption for process control and efficiencies.
- Infrastructure: Building regulations, ingredient storage & segregation, plant design, plant and building lifecycle and maintenance, sustainable and cost-effective energy sources.
- Driving and maintaining sales: accreditations (BRC, Salsa etc.) retailer connects, packaging design, sales and marketing techniques.
- Finance issues: sources (grants, loans, terms) managing cash flow, asset values and depreciation, decommissioning.

Essential knowledge needs to be easily accessible and available in a bite-size and bolt-together format for personalisation.

Existing food centres (Campden BRI, Leatherhead Food Research, National Centre for Food Manufacturing at the University of Lincoln, etc.) need support to adopt any part of the above which is missing and be well connected with their local SME food environment.

There needs to be a simple, trusted, online search tool to answer questions about food and nutrition.

## To achieve Outcome 3, support and incentives are needed to connect major retailers with SME food manufacturers.

Developing agile supply chain systems which connect SMEs to retailer Regional Distribution Centres (RDCs) could be the lifeblood for affordably celebrating local food culture and to make it thrive.

Encouraging SME manufacturers to source local ingredients and making sourcing visible will further enhance this and encourage engagement from consumers.

Financial support via tax incentives throughout this supply chain will encourage self-sustaining economic growth including investment and employment, to create an overall central benefit.

### To achieve Outcome 3, The financial and environmental conditions need to be right.

The environment needs to be right for UK food manufacturing businesses to feel secure in the UK and not consider off-shoring. If the environment and conditions were improved, more businesses might consider re-shoring, encouraging more UK investment. Indeed, if we met the right conditions, more foreign food businesses could set up in the UK as we recently saw in the technology sector.

For the UK to be the most attractive business destination we require progressive policies on energy, employment, planning etc.

## Outcome 4. Food sector attracts talent and develops skilled workforce in every region

### To achieve Outcome 4, positive Food & Drink career messaging must be incorporated into existing nationwide programs for maximum impact.

For the Food Sector to achieve any of its outcomes, it requires a higher quantity of better-quality applicants for progressive food sector roles in all functions. The food sector struggles with its reputation in many areas as, historically, this has not been an inspiring or aspirational career choice destination for students. Perceptions can be changed by raising awareness. This needs to be impactful on a large scale.

Current programs tend to have a small impact on a big number (IGD's Mmmake Your Mark) or a big impact on a small number (IFST & STEM Ambassador Programme | Institute of Food Science and Technology).

There is a clear opportunity for the food sector to tap into the Gen Z/Alpha mindset to benefit the planet and our own health & wellness.

### To achieve Outcome 4, the “level 3” (post-16 qualifications) pathway gap must be filled to secure the pipeline to University Food Science.

There is renewed interest within Gen Z/Alpha cohorts of AI initiatives for STEM, Street food, Sports nutrition etc., and a better understanding to study subjects which have clear career pathways. To maximise the opportunities from positive messaging, there needs to be a structured pathway to the sector's priority areas such as innovation, science and engineering.

Higher Education (HE) Food Science has struggled to recruit for BSc courses since the removal of Food Tech. A-Level 10 years ago, and high profile top performing courses are starting to close due to falling numbers [University of Nottingham to suspend 16 courses].

In the 10 years since the removal of Higher Education (A-Level) Food Technology in 2015, the UK food sector has suffered supply chain disruption from Brexit, Covid-19 and increasing global conflict.

The sector is also being asked to help deal with UK health, wellness, and sustainability.

## To achieve Outcome 4, engineering courses must include food & drink in the teaching content and career conversations.

The vast majority of the UK's top performing university engineering courses make little or no mention of the UK's largest advanced manufacturing sector.

The general perception amongst engineering academia is that the food sector does not do "proper engineering" when this could not be further from the truth. The food sector is mainly populated by engineers who have fallen into the sector by accident, not design. This is not the way to ensure the UK's future food security. Again, the answer to this lies in increased awareness.

Some learned societies have published recommendations for non-sector specific future skills to meet national needs. For example, the recent Engineers 2030 report from the Royal Academy of Engineering:

https://nepc.raeng.org.uk/media/zvxjqvh1/nepc-engineers-2030-final-report.pdf

## To achieve Outcome 4, the sector needs a properly funded pre-competitive support space within which knowledge can be shared to develop existing talent.

Food businesses, large, medium, and small, are in every UK region. The food sector is the holder of up-to-date knowledge and understanding on the future challenges and opportunities. Multinational food corporates and food support centres/businesses have the knowledge to assist in the Continuing Professional Development for talent in SMEs, as do the constituent institutions of ProFSET.

# Outcome 5. Food supply is environmentally sustainable, with high animal welfare standards, and waste is reduced

## To achieve Outcome 5, education is needed.

To understand what is meant by environmentally sustainable – having enough of what we need but just enough. System level thinking is critical and needs to include the consumer.

For producers, we should share best practice, and real-world examples of what works for all sizes of business. Some small businesses can apply one measure at a time and options need to be presented in simple, easy to use steps with the economic and environmental benefits clearly outlined. We need to:

- Research opportunities to showcase best practice and how it can be applied.
- Give the farming community access to new technology, investing in the new generations and the skill set.
- Assist consumers to understand the impact of food waste. Build on the work done by the Love Food Hate Waste campaign, including:
    - Use by dates
    - Planning
    - Portion sizes

## To achieve Outcome 5, the Food Sector needs to demonstrate how good it already is.

We do not do enough to promote our existing food standards and how good they are. By doing so, we could raise the profile of British food (this is likely to help with Outcome 6). We should highlight:

- Work being done to electrify energy intense processes, and to highlight what is already achieved to drive investment.
- Opportunities to integrate AI into manufacturing to minimise waste, and again highlight what has been achieved.

## To achieve Outcome 5, the Food Sector needs to collaborate.

Localised manufacturing networks could enable sharing of spare resources – what's waste for one can be a resource for another.

Let's find new routes for "out-of-specification" produce, and its use in added value products.

# Outcome 6. Trade supports environmentally sustainable growth, upholds British standards and expands export opportunities

## To achieve Outcome 6, the sector needs to collaborate and educate.

Good quality advice is key for all areas to enable change. Technology needs to be available for all to enable consistency. Professional bodies are actively publicising their knowledge, but this needs wider and concerted dissemination.

- ProFSET represents the expertise in scientific safety management.
- Research agencies can help to provide examples of how changes can be made.
- Pre-competitive space is critical, so that information can be easily shared and best practice adopted.
- British Standards must be reviewed and promoted. Imports need to meet our standards.
- Trade is driven by cost; sustainability can help drive down costs and therefore help trade.
- We should encourage making the most of UK produce, including in the public sector e.g. school dinners.

## To achieve Outcome 6, policy change and legislation is necessary.

We need to understand what the barriers are to trade, and support policy to remove them.

We need Food industry access to contacts at the Department of Trade and Industry to identify export opportunities.

Continued alignment with the EU is needed to help enable trade.

## To achieve Outcome 6, the sector needs to embrace opportunities provided by digital routes.

Digital technology has the power to share information through the supply chain (digital product passports). We should use this to identify weak areas and areas for improvement. Connectivity within the supply chain will help with an understanding of all the areas involved.

# Outcome 7. Resilient domestic production for a secure supply of healthy food

## To achieve Outcome 7, we need to maintain the level of domestic food production.

The UK has limited land resource. There are competing demands on agriculture, energy production, habitation and others. We need to manage that resource to ensure sustainable food production.

Home-grown production will not supply our entire food demand, and we enjoy products that grow in other climates such as coffee, bananas etc. For resilience, our nation needs to maintain domestic crop production for the core crops and animals on which we rely for basic sustenance.

We need agricultural technology and food crop varieties that are high yielding, resistant to disease and to extreme weather conditions. Climate change may affect the mix of crops and may be favourable to some, but there is also likely to be greater variability in weather.

## To achieve Outcome 7, we need to ensure that food supply is healthy.

We need to focus not just on healthy foods, but on healthy diets. We need clarity for the public on healthy eating. We include nutrition information on packaging, traffic lights guided by the NPM and HFSS, and we have public debate on “ultra processed foods” (UPF) – but its definition is confused. There is lack of trust in scientists, and that affects those of us involved in food and nutrition. If government cannot create a culture of trust in science, we as food scientists will struggle to communicate healthy eating messages.

We also need to balance health against affordability. There are health deserts, and some communities have difficulties accessing a healthy diet. We require products that are nutrient-dense with a complex structure.

## To achieve Outcome 7, we will need to deploy new technology.

The UK is a leader in biotechnology, and our agricultural yields in relevant crops are world-leading. However, there is vulnerability of monocultures as also mentioned in Outcome 8. We need diversity of crops and cultivars. Many crops are annual. If some could have 2 crops/year, potentially through new growing systems, not necessarily in fields, that would improve sustainability, but it needs research investment.

We need to avoid over-reliance on just in time manufacturing practices. They are driven by economics to ensure that businesses are profitable and that food is affordable. However, they create vulnerability. Increased storage capacity will improve resilience (see also Outcome 8).

### To achieve Outcome 7, we are dependent on food manufacturing to turn our raw materials into food products.

Food manufacturing gets little emphasis in food policy and research investment, in comparison with agriculture and health and nutrition. The processing step is important to achieving this outcome. This is a huge industry that transforms our raw agricultural products into safe, healthy, nutritious foods. Food manufacturers also focus on affordability and palatability as key purchase drivers, but this need not be to the exclusion of health. Greater support for this part of the food supply chain will aid development of new products that are healthy, sustainable, and commercially successful. For example, this may include plant-based alternatives to meat, and alternative production methods.

### To achieve Outcome 7, we need to communicate the benefits of new technology.

New technologies are important to deliver this outcome. There is some public mistrust in scientists in general, and in the motives of food manufacturers in particular, exemplified by concern over GM foods, "ultra processed foods" etc. This extends to concern over ingredients that are added for nutritional purposes, or for sustainability such as preservatives. The outcome requires the benefits and need for food technology to be positively communicated to consumers.

The UPF model is topical, but controversial. It does not criticise raw materials, but there is a demonisation of some products that are core parts of healthy eating. We need better models of what constitutes healthy food, and clear public communication. We need to encourage healthy eating habits, and we need to do that with youngsters. Breakfast clubs for schools are mentioned. We need to ensure they have healthy options and encourage healthy choices.

## Outcome 8. Greater preparedness for supply chain shocks, disruptions, and impacts of chronic risks

The group drew attention to the report by Professor Tim Lang **Just in Case: 7 steps to narrow the UK civil food resilience gap - National Preparedness Commission**, which addresses UK Food resilience, and to the report of the Climate Change Committee.

### To achieve Outcome 8, we need modelling and forecasting of risk.

We need to consider vital resources, which include, but are not limited to:

- Food raw materials, as discussed in Outcome 7.
- Carbon dioxide as an ingredient. The UK suffered a supply crisis on this recently.
- Fertilisers – some are a fossil carbon intensive resource. Sustainable alternatives are a priority.

- Energy. Food production is the UK's largest industrial sector. As a nation, we are reliant on imported energy. Vulnerability of all industries is recognised, and alternative energy sources must be prioritised for food production and processing.

## To achieve Outcome 8, we need to work together.

Individual farmers, food manufacturers and retailers respond to economic drivers based on their own commercial interests, working within a competitive market. We require government initiatives to set the direction for the overall national interest and to create incentives.

Agriculturally, there is a risk from monocultures. We have a limited range of crops. A disease could wipe out one of them. Food manufacturers rely on short supply chains. There is little storage at site. A supply chain issue can affect national food supply.

A national crisis plan needs to be prepared and regularly reviewed. We need to work with other nations too, to ensure frictionless systems to import and export food when necessary.

## To achieve Outcome 8, we need redundancy and resilience, which overlaps with Outcome 7.

We need to be efficient and to minimise waste. The food manufacturing industry is already good at this, and most waste happens in the home. ProFSET members will continue to offer advice on proven technologies for better waste management, recycling, and energy production, but execution depends upon private sector business investment.

We should invest in the development of food manufacturing processes to enable us to make use of waste streams, such as extraneous crop materials – stalks, husks etc., and to use by-products of other industries. This may require locating the producers of these by-products close to food manufacturing users.

We should invest in technology to have alternative ingredients available and a more flexible supply chain. This also requires an efficient regulatory framework to enable changes to be made quickly while maintaining safety and compliance. We can learn from other countries and markets that have had to innovate to cope with gaps in resources – such as the cold supply chain in Africa. Some there have an unreliable power grid so have developed passive technologies using solar energy etc.

We need strategic reserves of raw food commodities, processed food products, and associated materials such as packaging. Commercial drivers have resulted in an efficient just-in-time approach, but this is vulnerable. At a national level, we need to encourage greater reserves of vital supplies, perhaps close to the sites where they will be used.

## To achieve Outcome 8, we need to stress-test our systems

We need intelligence on the risks, and the supply chain vulnerabilities. We then need to test those and run drills.

Potential issues include:

- Raw material and product imports
- Energy costs
- Cyber security
- Dependency on a limited number of Regional Distribution Centres (RDC)
- Fraud. We cannot assume that all involved have the nation's interests at heart.

# Outcome 9. Celebrated and valued UK, regional and local food cultures

The nation is dangerously exposed by its dependence on food imports. Greater national production for increased self-reliance is urgent.

## To achieve Outcome 9, we need to encourage people to see value in their local food chains and the products they can produce.

This is mostly an issue of publicity. In every region there have always been products available in smaller retailers, farmers markets etc.

As part of the local school engagement and across different school years, local members of communities, technical experts and health professionals should be encouraged to provide case studies explaining where food comes from, and the technology involved, especially locally (See also Outcome 10). The children will teach their parents.

## To achieve Outcome 9, support to SMEs / start-ups need to be increased.

SMEs are increasing but need to identify the special added value they bring, compared to the "commodity "prices that supermarkets offer, since smaller scale implies greater unit costs. They need access to:

- Business planning.
- Capital grants for equipment.
- Local work placement initiatives.
- Online purchasing and delivery networks.
- Formation of local supply chain "cooperatives".

## To achieve Outcome 9, Local supply chains must grow.

Local politicians should be more aware of the health and wealth of their local food chains.

Not all startups and SMEs aim to grow, but for those that have ambition, the following will be necessary:

- Business planning, to cross the "Valley of Death" and get to scale.

- Technical information on equipment and facilities.
- Access to skilled employees.
- Relevant R&D.

This knowledge is available in organisations such as NFU, FDF, BRC, Business Connect, and all the professional bodies engaged with ProFSET. A much better communication system is required, and should be part of the growth initiatives of all regions.

# Outcome 10. People are more connected to their local food systems and have the confidence, knowledge and skills to cook and eat healthily

## To achieve Outcome 10, Food Education throughout the population must increase.

Despite its obvious impact on *national* health and wealth, the development of *international* large-scale farming, food manufacture and retail has produced "commoditisation" of Food in the minds of the general public. This needs urgently to be addressed since information on which people make which food choices is often based on misleading and inaccurate sources of opinion rather than fact. This has led to conflict rather than collaboration between the Food Supply Chain and its customers.

The learned bodies are surely the best placed organisations to work with Government Departments to rectify the situation, since they represent the collective opinion of our national experts.

## To achieve Outcome 10, education in schools should be a focus (see also Outcome 9).

For example,

- Learned bodies already provide lesson material via their websites, but teachers are not aware, and may be confused by outputs from lobbying groups, and inaccurate posts on social media.
- Turn school meals into lessons, provide information/solutions for schools & materials e.g. milk's journey.
- Introduce practitioners in the local food chains into schools to provide "real life" examples of practice.
- Develop a computer-based "Supply Chain Game," showing cost and profit versus sustainability and waste.

## To achieve Outcome 10, adult education should be improved.

Adults primarily get their information from the media, and now particularly social media.

Many programmes on food preparation are available, together with the visual and taste benefits that can be achieved. Whilst this encourages some people into home cooking, it avoids the nutritional benefit or otherwise of the meals produced, or the costs and energy used, relative to large scale manufacture. Some balancing of information is required. Professional bodies should provide accurate information.

Initiatives such as meal kits / boxes (such as “Hello Fresh”) encourage in-home skills, and raise issues of sustainability of raw material supply and product waste. This should be expanded and accompanied by accurate data.

Food banks already try to balance diets from the products they release. This should be publicised more openly and assisted by charities and local government support.