

# Sustainable diets for Scotland

## A food and drink industry briefing note

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The concept of a 'sustainable diet' highlights the environmentally unsustainable nature of current consumption patterns in affluent societies. In theory, a sustainable diet is one that minimises environmental damage, supports a resilient farming and food industry and ensures that people eat a healthy and nutritionally-balanced diet (adapted from WWF, 2012). In practice, however, this is an extremely complex and challenging area which involves many stakeholders, from both national and global perspectives, and is therefore not easy to achieve.

There are significant opportunities within the food chain to promote a more sustainable diet, but there are also considerable barriers to changing current practice. We highlight below five topical issues which bear on the concept of sustainable food production and consumption and help illustrate its complexity. These issues also highlight barriers to and opportunities for change, for the food industry.



## Topical issues:

A 'healthy diet' and a 'sustainable diet' are not necessarily the same thing (Macdiarmid 2013). Although the components of a healthy diet are clearly defined and accepted across many stakeholder groups, there is no such consensus on how a sustainable diet is defined. The WWF recently published a dietary guidance document in collaboration with the Rowett Institute (Livewell Report, 2011) that satisfies nutritional needs as well as meeting greenhouse gas emission reduction targets. The guidance did not address other issues, such as environmental, social or economic factors. Generally, however, it is accepted that sustainable patterns for the future will include a moderate reduction in the consumption of meat-based protein (particularly beef and sheep) and dairy produce, and an increase in the variety of plant-based foods to promote health and support biodiversity (Riley and Buttriss, 2011). There are opportunities for both primary and secondary producers within the food industry to help secure their

future through early involvement in such developments. Globally, food security and food equity are pressing issues. We live on a planet where over one billion people are overweight and obese, yet this number is matched by the number of people who are hungry, and again for the number living with inadequate food resources (Foresight report, 2011). A report by the United Nations Environment Programme has suggested that people living in rich nations should cut their meat consumption by half, in order for people living in poorer countries to eat more animal protein without harming the environment. Europeans currently eat 35% more protein than recommended by the World Health Organisation, most of which comes from meat. In addition to the opportunity to become involved in new food initiatives, there are opportunities for the food industry to promote high-quality, high-value meat consumption, albeit in smaller amounts or less frequently.



A key issue for environmental sustainability and health is that 'modern society' is one where certain socio-cultural norms, such as individualism, are taken for granted and seen as an unquestionable 'good' (Carlisle et al 2009). The concept of individualism places a high value on the consumer's unfettered freedom to choose, regardless of the consequences of such choice in terms of risks to human and environmental health and well-being. Calls for a more sustainable diet may therefore stand in opposition to the concept of 'consumer sovereignty' and free choice. They also conflict with long-established values and social norms around consuming animal products (Heinz and Lee 1998). Meat in particular continues to enjoy a high status food position in affluent society, and increasingly in newly-industrialising economies around the world (Beardsworth and Keil 1997). UK consumers may perhaps find it more acceptable to reduce food waste and buy more seasonal, local produce than to eat a low-environmental impact diet that involves radical lifestyle change.

Nevertheless, the concept of continued unsustainable consumption has been rejected by a number of 'new social movements', such as the increase in 'green consumers' who have an explicit interest in promoting environmental sustainability. We have also seen the emergence, in the UK, of increasing numbers of 'locavores' (consumers

who choose to eat local produce, such as the Fife Diet) and 'flexitarians/demitararians' (those who reduce but do not eliminate meat from their diet). Such groups provide alternative consumption narratives that challenge current patterns. They also provide a potential market for quality-assured meat products uncontaminated by the various 'scandals' surrounding some of the lower-value mass-produced foods.

Expert commentators in the food industry acknowledge that 'fresh', 'local' foods have a high social value for many consumers, although issues of cost and taste can never be ignored. This social value may enable more sustainable, non-meat alternatives or partial replacement products to compete successfully with the current high status of meat. In addition, the modern consumer is generally recognised as one that leading a busy, even harried, life, where convenience foods have high practical appeal but comparatively low status. There is considerable potential for many in the food industry to respond to and incorporate key consumer values such as freshness, locality and convenience into their marketplace offerings, whilst producing more sustainable alternatives to current patterns of meat consumption. A focus on 'sustainability' alone may never be sufficient to change perceptions and behaviour.

## Government – a key strategic role

- DEFRA (2007) has advocated public behaviour change in a number of areas, in order to promote a sustainable diet. We briefly outline those changes here and describe the reasons underpinning them:
- A diet with a lower environmental impact will involve less meat and dairy consumption and will therefore reduce methane emissions from ruminant livestock production.
- Reducing food waste at home will also help reduce carbon emissions associated with the disposal of such waste. Waste in food production should also be reduced. Excess food packaging, used by industry to protect food from spoilage, has been criticised.
- People should be encouraged to purchase fish produced in sustainable ways. However, recommendations to eat 'wild fish' may conflict with other policies designed to combat overfishing of the limited stocks of some species in certain zones.
- People should purchase more seasonal and local food. This is to help combat the deforestation involved in providing land for the production of crops such as cocoa, coffee, palm oil, soya, and beef products. It is also intended to combat the production of fruits and vegetables which are grown in water-depleted zones of the world, and then imported to the UK.
- People may wish to purchase more certified food e.g. organic, as these may have been produced using more sustainable growing methods.
- Most existing policies focus on efficient food production, but there are other policy interventions that can tackle changing consumer behaviour:
- Economic intervention, such as taxing certain food types or conversely lowering taxes on eco-friendly or eco-labelled food.
- Legislation or certified food labelling e.g. labels identifying foods as 'organic' or 'locally produced'.
- Targeted information, e.g. food-waste campaigns.

In the UK, interventions to restrict or direct choice in particular directions are often criticised as part of the 'nanny state' and resisted by industry and consumers alike. Against this we can set the fact that both groups may be reluctant to change voluntarily in desirable ways, and legislation can help shift both perceptions of 'the problem' and behaviour.

## Non-government organisations (NGOs)

To add to the complex and contentious array of issues briefly highlighted above, the category of non-governmental organisations covers a diverse group who may have shared or, equally probably, incompatible interests, agendas and concerns. Relevant NGOs include, for example, the National Farmers Union, the World Wildlife Fund, the Soil Association, organic farmers, various environmental movements, the catering and hospitality trade, and food lobbyists representing a wide range of consumers. All such groups add strong and important but potentially competing voices to the debate. Engaging this breadth of NGO interests is a significant challenge to all those seeking to create a more sustainable food system.

Given the diversity of interests here, it is not feasible to point to specific contributions, partly because the agenda for any particular group may shift in response to social, economic or policy changes but equally because some of the groups have their own internal debates, disagreements and divisions over key issues. Unexpected and perhaps unhelpful alliances between unlikely groups may emerge over time. Nevertheless, NGOs bring a vital wealth and breadth of experience and knowledge to the 'sustainability' table, even where consensus is lacking. For example, representatives of organisations such as those listed above will be able to point to the internal contradictions of current policy recommendations, retail practices and consumer demands. They are not simply stakeholders but irreplaceable partners in any attempt to shape the current food system in more sustainable ways.

### Retailers

Retailers have their competitive reputation, market share and profits to consider, but are nevertheless in a position to shape consumer experiences. They influence what is made available to consumers as part of a healthy 'sustainable' eating experience and lifestyle choice. Retailers can contribute voluntarily in different ways:



**Reformulation of diets** - this can be developed through consumer demand for alternative [healthier/green/cheaper/local] products to drive reformulation or retailers developing a niche market product

**Choice-editing:** for example, removing the least sustainable products from the market place by not stocking endangered fish species. This approach helps ensure that responsibility for achieving sustainable consumption is not entirely borne by consumers.

### Academics

Academics have a responsibility to produce an 'evidence base' in a rapidly changing environment and to engage with the other groups for purposes of knowledge exchange. Within the Scottish government funded research programme of 2011-2015, the Rowett Institute is undertaking research to investigate the 'Health impacts of sustainable ingredient selection in the food and drink industry' in the following ways:

1. We will undertake analysis of the macronutrients, micronutrients and phytochemical content of alternative protein sources.
2. We will undertake a series of human based studies to understand the metabolic fate of proteins and other macronutrients from alternative sources and as a platform to explore the relative consequences for health of resulting dietary changes in micronutrients and phytochemicals.
3. We will conduct qualitative research within the agri-food supply chain and with consumers in order to identify barriers to the acceptance of and change to alternative protein sources and assess the opportunities for their promotion.

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