

FACTFILE: GCE NUTRITION & FOOD SCIENCE

CHANGING CONSUMER BEHAVIOUR 1



Changing Consumer Behaviour

Learning outcomes

- Propose and justify advice to consumers on how to make food choices that have a positive impact on food security and sustainability.
- Consider the environmental and social cost of shopping for food in supermarkets.

Course content

It is widely agreed that our current food system is not sustainable. Unchanged, the global food system will continue to impact on the environment and climate by contributing to greenhouse gas emissions, pollution, deforestation and biodiversity loss.

In addition, the current food system does not provide enough safe and nutritious food for everyone. Millions of people face hunger on a daily basis and billions lack vital nutrients affecting their health and life expectancy. At the same time, the prevalence of overweight and obesity and diet-related diseases such as cardiovascular disease, stroke, some cancers and Type 2 diabetes is increasing.

Climate change and a growing population will only make things worse.

Eating sustainable food types that require fewer resources is necessary to reduce our environmental footprint and improve food security.

Advice to consumers on how to make food choices that have a positive impact upon food security and sustainability.

1. Eat more plants and reduce meat and dairy consumption

Global meat consumption is too high. Farming animals for meat and dairy requires space and huge amounts of water. The livestock industry also contributes to manmade greenhouse gas emissions. Consumers can redress the balance by prioritising plant-based foods such as pulses, grains and vegetables and moderating their intake of animal products.

When choosing meat consumers should consider various certification schemes such as assured farming systems (Red Tractor), pasture-fed livestock and RSPCA Assured, which minimise the impact upon the environment and ensure animal welfare.



Consuming more plants results in a lower environmental impact as it reduces methane, nitrous oxide and CO₂ production and ultimately reduces global warming. Growing plants uses less water than is required for animal production and reduces the impact of animal waste polluting the waterways. Intensive livestock farming contributes to land degradation which is a challenge to achieving global food security.

2. Buy local, seasonal products

Buying local, seasonal products contributes to thriving local economies and sustainable livelihoods - both in the UK and, in the case of imported products, in producer countries. Consumers choosing to buy local products support their local farmer and create a supply and demand chain leading to a growth in the local economy and employment. Furthermore when consumers buy local, seasonal food they protect the diversity of both plants and animals and the welfare of farmed and wild species. Local land can remain as agricultural land and not commercial land sold for urbanisation or housing. Hedgerows are maintained and local varieties of wildlife and insects can continue to use the land for habitation. Local, seasonal food reduces unnecessary CO₂ emissions and, ultimately global warming, through the reduction in processing, storage and transportation.

3. Buy certified products

Information that is specific to food products can be important to help consumers make the best sustainable food choices. Schemes such as NI Beef and Lamb Farm Quality Assurance, Red Tractor Assurance, Carbon Footprint, Conservation Grade, LEAF, Rainforest Alliance and the Marine



Stewardship Council identify products which have met specific standards in relation to varying aspects of sustainability.

4. Consider organic produce

Organic food production eliminates soil and water contamination as production strictly avoids the use of all synthetic chemicals. As a result of less chemical contamination local wildlife is preserved and the maintenance of field margins and hedgerows, accompanied by the use of natural pest control measures, leads to improved biodiversity. As most organically produced food is distributed locally less energy is used for transportation which automatically reduces carbon dioxide emissions and global warming. Organic farming contributes to rural economies through sustainable development and creates new employment opportunities, bringing significant benefits both to the economy and the social cohesion of rural areas.

5. Make responsible seafood choices

Many fish stocks are in a state of serious decline, with overfishing a great threat to marine wildlife and habitats.

Consumers can help reduce the strain on certain species by demanding that the fish they eat comes from sustainably managed stocks and is caught or farmed in a way that causes minimal damage to the marine environment and other wildlife. The oceans are home to a hidden diversity of life yet unsustainable fishing threatens fish populations, ocean habitats, coastal fishing communities and economies.

6. Get the balance right by cutting down on sugar, salt and fat

Eating a diet high in sugar, salt and fat is a significant contributing factor to obesity which is linked to many diet related health disorders such as diabetes, heart disease and cancer. Processed foods are often higher in sugar, salt and fat than meals prepared from raw ingredients. Consumers are encouraged to cut back on “white foods” such as sugar, salt and refined complex carbohydrates and eat a healthy, well balanced diet in line with current government advice. Choosing to eat ‘cleaner’ ultimately reduces the environmental impact of food processing and makes a positive contribution to food sustainability.

7. Grow your own

The carbon emissions from transport and refrigerated storage are a significant contributor to climate change. Growing your own reduces

significantly the potential impact upon the environment. Growing your own often follows organic standards with limited chemical use and preference for a more environmental friendly approach to farming on a small scale. Economic benefits are enjoyed by the consumer-producer and are often extended to friends and family when produce is in surplus. Furthermore 'grow your own' encompasses local and seasonal eating and the associated benefits.



8. Purchase from a wide range of retailers

Consumers are advised to spread their pound around and recognise the benefits of stepping back from the 'big 4' supermarkets (Tesco, Sainsbury, Asda and Morrisons). Alternatives to supermarket shopping are often more sustainable and include options, such as farmer's markets, Co-ops and box schemes. Farmers' markets support a sustainable food system by offering local, seasonal foods which help to ensure that small farms stay in business, land is protected from development and consumers receive fresh foods. Such markets provide a direct link between the farmer and consumer, benefitting both.

Food Co-ops are a simple way of buying fresh fruit and vegetables within the local community, whilst supporting a local business. While Co-ops have different purchasing policies, most favour sustainable, local and organic products. Produce sold through food Co-ops comes directly from local suppliers such as farmers, retailers or wholesalers, who select fresh fruit and vegetables according to seasonality, availability and value.

Box schemes allows the farming community to

connect with the urban community by delivering fresh, local, exclusively certified organic produce, direct to the consumer.

9. Aim to be waste free

In the UK roughly one third of the food produced is discarded and a significant amount of this could have been eaten. All the natural resources that have been used to make food and its packaging are wasted when consumers throw it away.

Food waste is commonly sent to landfill sites where it gives off powerful greenhouse gases, such as methane, that contribute to climate change. Over packaged food leads to further waste and expansion of landfill sites. The environmental cost of producing packaging which is wasted is significant. Packaging waste pollutes waterways, litters neighbourhoods and endangers wildlife.

10. Reduce plastic packaging

Plastic packaging plays an important role in the food industry. It helps preserve and extend the shelf life of food and is critical in reducing food waste. However, many of the plastic items used in the sector are single use making them problematic. They are not captured for recycling, finding their way into general waste and into landfill or incineration or littered meaning they pollute the natural environment. Consumers can help by choosing foods with minimum packaging, look for foods with packaging that is designed to be easily recycled and using their voice to encourage brands and retailers that continue to use plastic to find alternatives.

The environmental and social cost of shopping for food in supermarkets

Environmental cost

Large shed-like structured buildings take up land and are often built on green belts. This, along with the necessary infrastructure to support the traffic volume, means that land cannot be used for farming. Traffic congestion and increased car use by consumers to shop in supermarkets that are often located out of town means an increase in CO₂ emissions. Furthermore environmental costs stemming from heat, lighting and air conditioning systems are significant.

Supermarkets, despite taking action to reduce waste, do produce waste from packaging and food which is often sent to landfill and eventually leaches harmful chemicals into the ground and water. The decomposition of waste leads to

methane gas emissions contributing to global warming and climate change.

Supermarkets often have a higher dependence on imported food and don't always support local and seasonal food; many have been criticised for "green washing" consumers by loosely using terms such as "local" and "seasonal" to mislead consumers. UK sourced produce is transported by road and imported produce by air freight, which emits more greenhouse gases per food mile than any other mode of transport.

Social cost

Supermarket pricing policies have been criticised for encouraging an increased consumption of unhealthy food via the manipulation of shoppers through clever marketing techniques; encouraging impulse buying may be to blame for the decline in health of the local community. One of the most noticeable social costs of shopping in supermarkets is the potential decline of the high street. Out of town supermarkets lead to disinvestment and derelict buildings as they draw shoppers away from town centres and remove character. Deterioration of the high street through the growth of the supermarket ultimately erodes choice for the consumer. Supermarkets have been further criticised for contributing to social exclusion through the creation of food deserts which discriminate against low income shoppers and marginalise those without cars.



Revision Questions

- 1 Using local examples explain how the growth of the supermarket has led to the social decline of the local community.
- 2 Justify the advice to consumers to eat less but better quality meat as a means of making a positive impact on food security and sustainability.

