

UK-ANATION UNITED BY FOOD







INTRODUCTION

There's never been a more important time to talk about food. It is more affordable, more diverse, more traceable and more available in Britain than ever before. But this doesn't mean that we can ignore the significant challenges we will face in sustaining ourselves in the future, both here in Britain and globally. The landscape for food is changing – not least our dietary needs at home and the enormous challenge, and responsibility, of feeding a global population which will approach ten billion people by 2050.

The UK is a fantastic place to produce food. We have the climate, the skills and the natural resources to produce quality, fresh, affordable, nutritious food for everyone, in every corner of the UK. We are in a privileged position in this country that we do not have to worry about whether there will be food on the shelves, whether the produce we buy will be safe, and if the standards of welfare in Britain are world leading. For most of our lifetimes, the UK has been lucky to take food supply for granted. This privilege must not be taken for granted. We are at a pivotal moment in history with a chance to shape our food policy and our food security for generations to come.



To do this there are some major questions that need to be answered:

- Do we have a moral imperative to maximise the production of the food we produce well in the UK?
- What role does British food and farming have to play in producing healthy, nutritious, affordable food for every person in the UK, in every walk of life?
- Is it important to maintain the integrity of British food and the high standards it is produced to, and to ensure that all food imported into this country conforms to the same high standards?

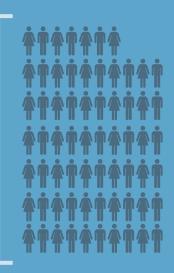
 How do we make sure we respect nature, and the natural environment, as we continue to produce fresh, affordable, nutritious British food?

I want this document to be the start of a conversation with food producers, food processors, politicians, retailers, policy makers and consumers – in short, with everyone who has an interest in food – because we need to work together to help plot the course for the future of food in Britain. If we do this, then the benefits – economically, socially and environmentally – will be great.

Let's talk about food.

67 MILLION PEOPLE A YEAR

According to the FAO (2002) even by 2030, the world's population will still be growing by 67 million people a year.





The UK ranks third overall for food affordability, availability, safety and security behind Ireland and the USA.

Source: 2017 Global Food Security index. The Economist Intelligence Unit







THREE Earths

If production hadn't changed from methods of a century ago, we'd have needed three Earths to meet our needs by the year 2000 alone.



MORAL IMPERATIVE

The world's population depends on a small and precious area of farmland for all its food needs. About $37\%_1$ of the world is farmland. This 49 million square kilometres must grow everything an increasingly hungry world needs. And in the decades ahead that need will only become more acute.

The growing global challenge of a population expected to be close to ten billion by 2050, combined with predicted climate change, presents a fundamental challenge for our food producers across the world. This means producing 50% more food than we do today to feed the world and adapt to changing diets.

The last four decades have seen astonishing increases in food production but this has relied on a steady flow of science, innovation and investment. Since the 1960s, the world has needed approximately one-third less land to produce the same amount of grain. More starkly, if production hadn't changed from methods of a century ago, we'd have needed three Earths to meet our needs by the year 2000 alone.

There is a compelling moral imperative to make the most of all productive land, to help us continue to make a meaningful contribution to our own needs, wherever we farm. We can do this by utilising our availability of water, infrastructure, and skills, but this must be done while minimising our impact on the environment. Many technologies are developing (eg robotics, genetics, data) to help us produce more from less, with less environmental impact, and we must continue to play our part.

But British farmers and scientists can't lead this farming revolution alone. Across the globe many governments are leading a serious debate about food and are making significant plans and strategic global investments.



BRITAIN NEEDS A FOOD PLAN THAT DELIVERS FOR EVERYONE AND THINKS BEYOND OUR SHORES

EATWELL GUIDE



- Fruit and vegetables
- Potatoes, bread, rice, pasta and other starchy carbohydrates
- Beans, pulses, fish, eggs, meat and other proteins
- Foods high in fat and sugar
- Dairy and alternatives



For the what we eat plate, the food high in fat and sugar includes oils and spreads Source: Public Health England in association with the Welsh Government, Food Standards Scotland and the Food Standards Agency in Northern Ireland 1,400 1,400 1,400 1,400 5 YEARS 2,800 2,200
2,200
19-20 YEARS

2,400 1,800 1,800 51-55 YEARS

CALORIE INTAKI

Calorie intake through life stages by gender

Source: https://health.gov/dietaryguidelines/2015/guidelines/appendix-2/

NUTRITION

27% of adolescent girls have iodine intakes below the lower reference nutrient intake (LRNI). One glass of semiskimmed milk (200ml) provides 46% of the recommended daily amount of iodine for girls aged 11 to 14.

27% of girls and 18% of boys aged 11 to 18 and 11% of four to ten-year-olds have zinc intakes below the LRNI. A bowl of high fibre breakfast cereal plus semi-slimmed milk provides over 1g of zinc per portion – 11% of the recommended daily intake. Other sources of zinc are meat, potatoes and veretables

Vegetables and potatoes provide a number of the micronutrients that are often short in people's diets. They currently provide an average of 31% of vitamin A, 26% of folate, 15% of iron, 16% of magnesium, 10% of zinc and 24% of potassium intakes in the diets of adults aged 19 to 64.

^{*} The LRNI is the amount sufficient only for the 2.5% of the population group with the lowest needs



HEALTH AND NUTRITION

We may be a well-fed nation but within Britain there are significant dietary imbalances within most segments of society, with poor uptake of and access to a healthy balanced diet. This is associated with societal issues such as health inequalities. Poor diets, particularly when related to obesity, place far greater pressure on the National Health Services, and often mean poorer economic outcomes for families and the wider economy.

Challenges linked to poor diets are about more than the consumption of excess calories. In order to improve diets it is important to consider the overall nutritional quality of the diet. British farmers have real interest in reversing this situation, growing the raw ingredients of a healthy lifestyle.

According to Diabetes UK, more people than ever have diabetes and more people than ever are at risk of Type 2 diabetes. This is strongly associated with the rise in obesity. If nothing changes, more than five million people will have diabetes in the UK by 2025.

According to NHS England, in 2016/17, one in five children aged ten to 11 and one in ten children aged four to five were classified as

obese, which is likely to cast a long shadow over their adult years. The same research also showed that in 2016 only 26% of adults and 16% of children consumed five or more portions of fruit and vegetables a day.

Professionals have identified that there are substantial areas of the population who have low intakes in essential vitamins and minerals, which can be obtained from key agricultural products such as lean meat, fruit, grains, milk, potatoes, oil seeds and vegetables.

"Obesity, particularly childhood obesity, is a substantive issue for the UK and something that needs to be taken seriously by the whole supply chain. It frequently is the result of an unbalanced diet coupled with a sedentary lifestyle, and farmers and producers have a key role to play in continuing to provide a variety of nutritious products that enable calorie and nutrient needs to be achieved. At a population level, UK diets fail to meet the government's Eat Well Guide recommendations, particularly in fruit and vegetables (average consumption needs to increase by 54%) and starchy carbohydrates e.g. bread and potatoes (average consumption needs to increase by 69%)",



BRITAIN NEEDS A FOOD PLAN THAT HELPS ENSURE EVERYONE HAS ACCESS TO A HEALTHY BALANCED DIET

- $1\ https://www.diabetes.org.uk/diabetes-the-basics/what-is-type-2-diabetes$
- 2 Statistics on Obesity, Physical Activity and Diet England 2018, NHS Digital $\,$
- 3 Scarborough et al, 2016

IMPORTANT TO **CONSUMERS**

Consumers identify the following areas as important to them after leaving the EU

Source: Food Standards Agency – Citizens' views of the EU and food issues, summary of findings, January 2018



MAINTAINING SAFETY STANDARDS

(including hygiene, ingredients, provenance and animal welfare)



Maintaining (or improving)

OF FOOD



KEEPING FOOD PRICES AFFORDABLE



SUPPORTING

FARMERS

2015/16

2014/15

LABELLING OF FOOD

REDUCING **WASTE**

2331 2017/18 2265 2016/17

1733

1563

An incident is defined by the Food Standards Agency as: 'Any event where, based on the information available, there are concerns about actual or suspected threats to the safety or quality or integrity of food and feed that could require intervention to protect consumers' interests.'

Potential scale of food fraud in the UK, based on Organisation for Economic Cooperation and Development estimates of share of global trade made up of counterfeiting and piracy.

National Food Crime Unit, 2016



INTEGRITY AND STANDARDS

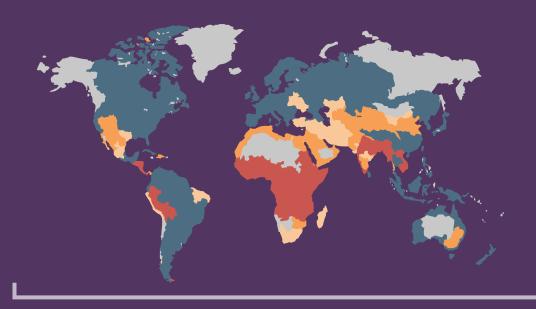
The UK's consumers expect their food to be safe and produced with integrity; it is a testament to the strong food policy system we have in the UK. But this right is not universally available around the world. This is why affordable food must not come at a cost to standards and integrity. Production standards should apply to all the food we eat, both imported and home produced.

Upholding British standards from farm to fork is vital as we exit the EU. Differences in global food standards, volatile prices and an increasingly complex global market create opportunities for food fraud. So if Britain is to become a leader in trade, shouldn't it be on the basis of investing in protecting safety and integrity, including in new technologies to detect and deter incidents of adulteration, safety and integrity?

British farmers and food businesses are proud of their production standards and are looking to explore new export opportunities based on the safety and quality of UK produce. Loss of confidence at home or overseas in the provenance and safety of our food could have economic implications especially as the food and drink industry accounts for 11% of the UK economy.



BRITAIN NEEDS A FOOD PLAN THAT DELIVERS SAFE,
AFFORDABLE, NUTRITIOUS FOOD FOR EVERY PERSON
IN EVERY CORNER OF THE UK WHILE ENSURING HIGH
PRODUCTION STANDARDS AND INTEGRITY ARE
MAINTAINED



300 250 Index (100=1960)200 150 Global average wheat yield Global population 50 Global wheat area UK wheat yield 0 1990 2000 1960 1970 1980 2010 2017

WATER SCARCITY



Economic water scarcity



Physical water scarcity



Approaching physical water scarcity



Not estimated water scarcity

GLOBAL POPULATION AND WHEAT YIELD

Source: World Bank, USDA, Defra

Source: Water for food, water for life: a comprehensive assessment of water management in agriculture,

mowing or pasture, and land temporarily fallow.

PERMANENT CROPS

Long-term crops which do not have to be replaced for flowers, and nurseries.

TEMPORARY CROPS

FALLOW

without being sown.

TEMPROARY MEADOWS AND **PASTURES**

Cultivated with herbaceous forage crops for mowing or pasture for less than

LAND FOR GRAZING

Land covered with grass or herbage and suitable for grazing by livestock. This includes both permanent and temporary meadows and pastures.

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PERMANENT MEADOWS AND **PASTURES**

Permanently used to grow herbaceous forage crops, either cultivated or growing wild.



WORKING WITH NATURE

The Food and Agriculture Organisation of the United Nations has noted that food production will always have a level of impact on natural systems. This impact needs to be monitored holistically, while acknowledging the work farmers are doing to protect and enhance soil, water and air quality, improve biodiversity, and maintain some of our most iconic landscapes.

No matter where food is produced, farming relies on healthy natural systems and resources. Despite technological advances, success still relies directly or indirectly on nature through weather, healthy soil and clean water. The quality of soils and water are vital indicators of productive capacity, so as food producers, we must understand where the threats in the global systems lie.

In a world of finite resources, water footprint is important. The UK has some of the highest crop yields in the world and for wheat production the UK has one of the best yield to water ratios in the world.

Each hectare of land is feeding more and more people. Since the 1960s the amount of arable land available per person on the planet has halved to 0.2 of a hectare.

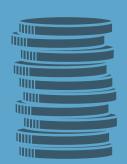
During that time global food production has continued to increase. This has been achieved through working with nature to maximise its potential – improving soil fertility; breeding resilience in plant/animal genetics; and tackling crop/animal disease.

Soil and climate are big determining factors over what food is produced where, in the UK and the world. Not all land is suited to producing the same kind of food. Nations need to trade to support populations to have a healthy balanced diet all year round, while making the most of their own natural resources to contribute to the food security mix.

Due to natural environmental extremes, diversity in the global food supply base is key to managing supply risks due to natural extremes. Global commerce is critically important to meet global nutritional needs, but short term trading, based on price, threatens the ability to take a low impact approach.

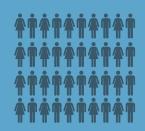


 $1\ https://www.narcis.nl/publication/RecordID/oai%3Atudelft.nl%3Auuid%3Aa233f5ae-ea79-4166-848c-1861f8ea4da9\\2\ World\ Bank$



£113 BILLION

Farming is the bedrock of the UK's largest manufacturing sector, food and drink, which contributes £113 billion to the country's economy.



4 MILLION PEOPLE

The UK food and drink sector employs nearly four million people.



61%

British farms produce 61% of the nation's food.



10,000 FOOTBALL PITCHES

Farmers have planted 10,000 football pitches worth of wild flowers, creating homes for bees and food for birds and insects.



270,000 HECTARES

There are
around 270,000
hectares managed
voluntarily under
the Campaign
for the Farmed
Environment.



HIGH STANDARDS

We have led the way on high standards of animal welfare.

