

WORKING TOGETHER FOR SUSTAINABLE FOOD





Conservation

**Climate Change** 

Sustainability

# Prime cuts Waluing the meat we eat

### A sustainable food brief by WWF-UK and the Food Ethics Council

#### **About WWF-UK**

WWF is the world's leading independent conservation organisation. We're at the heart of efforts to tackle the most serious conservation challenges facing the planet – to build a future where people and nature thrive together.

Our food programme is a ground-breaking initiative. It's dedicated to achieving a sustainable, equitable and fair food system. We aim to reduce the main global environmental impacts of that which we grow and eat, while providing healthy, nutritious food for an expanding world population. Since 2009 we've been working with government, retailers and producers to understand and reduce the impacts of food consumption on the environment.

For further information on the work of our food programme visit our website: wwf.org.uk/food

#### **About the Food Ethics Council**

The Food Ethics Council is a charity that provides independent advice on the ethics of food and farming. Our aim is to create a food system that is fair and healthy for people and the environment. Our 13 Council members include bioethicists and moral philosophers, farmers and food industry executives, scientists and sociologists, academics and authors.

Find out more about our work, including the members of the Council, our exclusive Business Forum, and our must-read magazine, *Food Ethics*, on our website at *www.foodethicscouncil.org* 

The report on which this brief is based is part of the livestock dialogues project - a series of discussions and research pieces that explore the challenges of sustainable diets as a means to address the stalemate in debate over the role of meat consumption in mitigating climate change. We work with government, retailers and producer organisations in this project and we're very grateful for their input and insight.

This brief is based on a report by WWF-UK and the Food Ethics Council – *Prime cuts: valuing the meat we eat* 

Lucy Young senior policy adviser (food) lyoung@wwf.org.uk

We're very grateful to the Esmeé Fairbairn Foundation for funding this work.



INTRODUCTION The idea of encouraging people in the UK to eat less meat is a contentious issue – despite the potential benefits for health and the environment. Producers and primary

> processors raise legitimate concerns about the impact that reducing meat production would have on their businesses, and politicians remain wary of the reactions of both industry and the public.

Yet if we're to address the multiple challenges of climate change, water scarcity, land use change, biodiversity loss, obesity and malnutrition, global poverty and inequalities in a more affluent world of nine billion people by 2050, we have to consider reducing meat consumption in developed countries such as the UK as part of the solution. With rising food and feed prices already impacting on consumers and farmers, business as usual is not an option. So the question is how to move forward, despite these challenges.



Focusing on 'better' meat rather than solely eating less meat could deliver broad benefits

It's been proposed that focusing on 'better' meat too, rather than solely on eating less meat, could be a more palatable message – and one that could deliver broader benefits than simply eating less meat. Yet there is no clear understanding, among producers or consumers, of what better might mean in practice.

The report on which this summary is based aimed to explore the scope of what 'less but better' meat consumption could mean, to identify potential win-wins, trade-offs and evidence gaps, and to make recommendations for next steps. It is intended to provide focus for policy development, engagement and research. Specifically it is intended to provide a useful contribution to Defra's Green Food project.

'There is still no international agreement on the details of a sustainable diet, but most experts agree that consumers in developed countries should reduce their relative consumption of meat and dairy products and proportionately increase their consumption of vegetables and fruit products.'

UNEP, 20121

## WHY EAT LESS MEAT?

What we eat impacts on climate change, water and biodiversity – and some foods use more natural resources than others. Sustainable production of food is important: it can significantly contribute to reducing the UK's environmental footprint. However, evidence suggests that production efficiencies alone will not allow us to reach our greenhouse gas reduction targets – we also need to change the types of food we eat, focusing on the hotspots. Meat has the biggest impact in terms of greenhouse gas emissions, so reducing the amount of meat we eat in the UK is critical to reducing our footprint. Among those calling for this are Lord Stern, the UK government's Committee on Climate Change, and the UK chief scientist's *Foresight* report.

The global challenges presented by meat and livestock production and consumption have been written about extensively<sup>2</sup>. Growing global demand for meat will only exacerbate these challenges. Per capita, UK total meat consumption is around average for EU member countries at just over 50kg a year<sup>3</sup>, but this is approximately twice the world average<sup>4</sup>.

Reducing meat consumption in high consuming countries like the UK would potentially deliver benefits for climate change, public health, the environment and animal welfare, while also reducing pressures on land use and upward food prices.

However, a simple 'eat less meat' message alienates some people and could have unintended consequences, not least on farmers' livelihoods. It has been proposed that focusing additionally on 'better' meat could enable broader issues to be addressed and help to identify a way forward.

# DEFINING 'BETTER' MEAT CONSUMPTION AND PRODUCTION

Our research identified, in no particular order of priority, nine potential ways to define 'better' meat consumption and production across a spectrum of outcomes for climate change, the environment, animal welfare, human health, livelihoods, social justice and social values.

#### Better for health:

Red and processed meat consumption has been associated with risks to health including cardiovascular disease, stroke, diabetes and colorectal cancer. This has led to recommendations that consumption in high-consuming countries such as the UK should be reduced and the consumption of vegetable based foods increased.

#### Better for climate change and the environment:

Within current industry policy, better for reducing greenhouse gas emissions means achieving an animal's finishing weight as early as possible, reducing reliance on artificial fertiliser, and using feed with lower-carbon protein sources. There are tensions between this 'efficiency' approach and other environmental, animal welfare and socio-economic outcomes.

The notion that favouring meat from chicken and pigs rather than beef and lamb is better for reducing greenhouse gas emissions is less clear-cut than feed conversion rates suggest. Intensively-reared chickens and pigs are also associated with incidents of poor animal welfare in the UK and abroad.

Meat from more extensive and self-sustaining systems is sometimes associated with higher levels of animal welfare and environmental stewardship. Higher greenhouse gas impacts from slower growing, forage fed animals are in part offset by grazing of marginal land, which has an important role in managing grassland habitats and sequestrating carbon in permanent pasture.

#### Better for biodiversity:

Some naturally grazed, grass-fed livestock systems can avoid much of the impact of intensively produced cereal-fed animals and have benefits for biodiversity, particularly in many parts of our uplands. 'Better for biodiversity' can also be defined as meat from rare, locally-adapted breeds.

#### Better for animal welfare:

Increases in production of meat has been accompanied by increasing concerns around a host of animal welfare issues including lameness and other physiological disorders. Better can be defined as meat from animals that have been able to live 'a good life'. There is continuing debate as to whether large scale production is necessarily incompatible with good animal welfare.

NATURALLY
GRAZED, GRASS-FED
LIVESTOCK AVOID
MUCH OF THE IMPACT
OF INTENSIVELY
PRODUCED CEREALFED ANIMALS AND
HAVE BENEFITS FOR
BIODIVERSITY

#### Better for farming profitability:

The ability of farmers and producers along the supply chain to make an economic return is a key element of creating a meat system that can support better meat consumption. Profitability for livestock farmers is already challenging, and it's compounded by rising feed costs. There is some evidence that smaller scale, higher value production systems can also deliver on profitability. Increasing global demand could offer export opportunities for high quality, sustainably produced meat, though unless production and consumption policies are addressed elsewhere in the world, this could be perceived as the UK undermining its responsibilities towards greenhouse gas mitigation.

#### **Better for fairness:**

Unfairness in the meat supply system has been highlighted by the price squeeze on farmers' incomes by supermarkets and other supply chain players. Better can include fairness in supply chains for producers and workers. Social justice also extends to consumers, as healthy and sustainable meat should be accessible to those on the lowest incomes as well as better-off consumers. Fairness also relates to achieving more equitable consumption globally.



In the home we waste 10% of edible red meat, 14% of poultry, bacon and ham and 15% of meat products.

#### Better for reducing waste:

This requires valuing meat, making the most of each carcass and reducing the amount of edible food that ends up in pet food, incinerated or in household waste. In the home we waste 10% of edible red meat, 14% of poultry, bacon and ham and 15% of meat products. As meat is relatively more expensive than other food items, reducing meat wastage offers win-wins for greenhouse gas reductions and financial savings for consumers.

#### Better for quality and taste:

These are both important for consumers, though hard to define. Perceptions of quality can include provenance and production methods – for example, free range or organic; more expensive cuts of meat; and freshness or maturity. Although taste and pleasure are personal experiences, they are shaped by cultural experiences.

#### Better for reconnecting producers and consumers:

A focus on provenance — whether local, regional or national — presents opportunities for connecting and providing benefits for producers and consumers. Better can be defined in the way we value meat through this deeper connection between the person eating the meat, the animal that provided it and the farmer that reared it, rather than simply seeing meat as a homogenous portion of protein.

# WIN-WINS AND TRADE-OFFS

Our research highlights a number of win-wins for 'better' meat consumption. For example, pasture-fed livestock and more extensive production systems offer benefits for health and biodiversity and potentially for animal welfare and producers. Also reducing waste throughout the system has multiple benefits and is widely supported. A focus on provenance – whether local, regional or national – presents opportunities for connecting, and providing benefits for, producers and consumers. Reconnecting people to food and farmers may provide access to the changes in attitudes and behaviour that would encourage more considered meat consumption. Furthermore, less but better doesn't necessarily need to cost consumers more if the savings from buying less offset higher costs of better meat and meat products.

We also found trade-offs between definitions. We conclude it may not be possible to achieve better meat consumption across all definitions at the same time. In particular, defining better meat consumption as having less greenhouse gas impact in isolation is problematic. For example, more extensive systems such as organic farming, which is typically associated with higher levels of animal welfare and environmental stewardship, rear slower growing animals that during the course of a longer life require more feed energy and produce more methane – increasing their greenhouse gas impact. Such judgements are not always clear cut, and are complicated by the need to include the impacts of land-use change from animal feed, nitrous oxide emission and carbon sequestration through pasture in life cycle assessments.



THE MOST
IMPORTANT ASPECT
OF 'BETTER' MAY BE
THAT IN EATING MEAT
WE RECOGNISE IT AS A
VALUABLE RESOURCE
AND BECOME LESS
INCLINED TO WASTE IT

We also recognise that climate change, environmental and producer benefits from less but better meat consumption are only potential benefits, as the relationship between consumption and production is not clear given that meat imports make up 42% of UK consumption, and exports comprise 20% of UK production. Hence reduced UK consumption wouldn't necessarily translate into reduced UK production and may have unintended consequences. Neither can we assume that if consumers reduce their consumption they'll automatically seek out UK sourced meat and trade up to better that improves economic returns for farmers.

Reduced demand through less meat consumption could potentially put downward pressure on prices as the same number of producers chase fewer customers. We raise the idea that the industry could mitigate potential lower UK sales by positioning itself as an exporter of high quality, sustainably produced meat. However, we recognise that unless production and consumption policies are addressed elsewhere in the world, this could be perceived as the UK undermining its responsibilities towards greenhouse gas mitigation. The EU's Roadmap to a Resource Efficient Europe and reform of the Common Agricultural Policy potentially offer scope for a coordinated approach to sustainable consumption and production policies, including economic incentives for more environmentally sustainable and higher welfare farming models that could accompany reduced consumption.

The most important aspect of 'better' may be that in eating meat we recognise it as a valuable resource. By recognising meat as a high quality food, we are encouraged to acknowledge and respect the animals that provided it, the farmers that produced it and those in the supply chain that prepared and delivered it; and in recognising its value, we will be less inclined to waste it.

# CONCLUSIONS AND RECOMMENDATIONS

Despite the complexities, we conclude that compelling evidence exists for UK governments and the industry to acknowledge the importance of reduced meat consumption as part of healthy, sustainable diets – and to commit to explore further a 'less but better' approach. We welcome the recognition of the importance of sustainable food consumption within the next steps of the Green Food project<sup>5</sup> and the intention to facilitate a 'wider and more sophisticated debate across the whole food chain about the role diet and consumption play in the sustainability of the food system'.

We specifically recommend that the next steps for Defra and its partners in the Green Food project include work to:

- define sustainable diets, including the role for less but better meat consumption;
- convene a symposium to engage a wide range of stakeholders to explore the issues raised by this report;
- explore mechanisms and policies that would support a transition to less but better meat consumption and production;
- engage all players throughout the food chain and develop actions for producers, processors, retailers, consumer organisations, civil society organisations and policy makers together; and
- actively engage with EU policy processes to support the transition towards sustainable food consumption and production.



THE NEXT STEP
FOR DEFRA AND
ITS PARTNERS
SHOULD BE DEFINING
A SUSTAINABLE
DIET. THEY MUST
CONSIDER HOW
EATING LESS BUT
BETTER MEAT
WOULD CONTRIBUTE

TO ACHIEVING THIS

We recognise that this research is a first step towards understanding what less but better meat consumption could mean in practice and applying this to the different livestock sectors has been beyond the scope of our research. We therefore recommend that the bodies supporting the different livestock sectors undertake work to:

- more fully evaluate the nine definitions of 'better' identified here, in respect of their sectors;
- identify priority definitions for environmental, social and economic sustainability; and
- identify the incentives that would support market transition towards these win-wins.

We also recommend further research to include:

- better comparability of data and consensus on methodology of life cycle assessment studies relevant to livestock production;
- understanding the market mechanisms/policies that would support livestock farmers to diversify and support transition to less but better production; and
- consumer research to understand whether a 'less but better' message is more likely to produce reductions in meat consumption than a simple 'less' message.

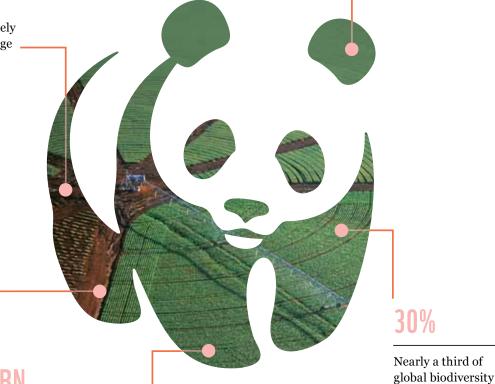
### REFERENCES

- 1 UNEP, 2012. Avoiding Future Famines: Strengthening the Ecological Foundation of Food Security through Sustainable Food Systems. United Nations Environment Programme, Nairobi, Kenya. www.unep.org/publications/ebooks/avoidingfamines/ portals/19/UNEP\_Food\_Security\_Report.pdf
- Food and Agriculture Organisation of the United Nations (FAO) (2006) Livestock's long shadow environmental issues and options. Rome. FAO (2009) The state of food and agriculture Livestock in the Balance. Rome. D'Silva, J and Webster, J (eds) (2010) The Meat Crisis. London: Earthscan. Fairlie, S (2010) Meat a benign extravagance. East Meon: Permanent Publications. Garnett, T (2007) Meat and Dairy Production and Consumption. Working Paper. University of Surrey: Food and Climate Research Network. Garnett, T (2008) Cooking up a storm: Food, greenhouse gas emissions and our changing climate. University of Surrey: Food and Climate Research Network. Audsley, E, Brander, M, Chatterton, J, Murphy-Bokern, D, Webster, C, and Williams, A (2009). How low can we go? An assessment of greenhouse gas emissions from the UK food system and the scope to reduce them by 2050. FCRN/WWF-UK. Westhoek, H, Rood, T, van den Berg, M, Janse. J, Nijdam, D, Reudink, M and Stehfest, E (2011) The Protein Puzzle: The consumption and production of meat, dairy and fish in the European Union. The Hague: PBL Netherlands Environmental Assessment Agency.
- 3 Westhoek, H, Rood, T, van den Berg, M, Janse. J, Nijdam, D, Reudink, M and Stehfest, E (2011) *The Protein Puzzle: The consumption and production of meat, dairy and fish in the European Union*. The Hague: PBL Netherlands Environmental Assessment Agency.
- 4 ibid.
- 5 www.defra.gov.uk/news/2012/07/10/green-food-project

## Sustainable food in numbers

In the UK, meat dishes are responsible for nearly half of our food greenhouse gas emissions

Meat consumption in the UK is approximately twice the world average



£1.2BN

estimated cost to the NHS of early deaths related to excessive meat consumption

of men in the UK exceed the recommended red meat target of 70g per day



To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature

wwf.org.uk

WWF-UK, registered charity number 1081247 and registered in Scotland number SC039593. A company limited by guarantee number 4016725 © 1986 panda symbol and ® "WWF" Registered Trademark of WWF-World Wide Fund For Nature (formerly World Wildlife Fund). WWF-UK, Panda House, Weyside Park, Godalming, Surrey GU7 1XR, T: +44 (0)1483 426333, E: lyoung@wwf.org.uk, wwf.org.uk



loss is attributable to livestock production