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LiveWell for LIFE final recommendations

On our plate today: healthy, sustainable food choices

Healthy people, healthy planet.



LiveWell for LIFE is a pioneering project which aims to contribute towards the reduction of greenhouse gas emissions from the EU food supply chain, and demonstrate what sustainable diets could look like for different European countries.

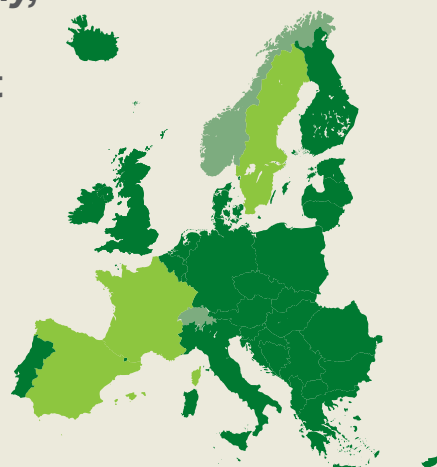
‘On our plate today: healthy, sustainable food choices’

is the project’s final report and was written by Brigitte Alarcon and Erik Gerritsen. For further information about the project and all our reports please visit:

livewellforlife.eu

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PROJECT PARTNERS



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CONTENTS

ACRONYMS AND ABBREVIATIONS	4
FOREWORD BY OLIVIER DE SCHUTTER	5
FOREWORD BY TONY LONG	7
EXECUTIVE SUMMARY	8
CHAPTER 1: LIVEWELL FOR LIFE: AIMS AND ACHIEVEMENTS	11
CHAPTER 2: DEMONSTRATING THE BENEFITS OF HEALTHY AND SUSTAINABLE DIETS	15
2.1 GOOD FOR THE PLANET	18
2.2 GOOD FOR HEALTH	23
2.3 GOOD FOR CULTURAL DIVERSITY	25
2.4 GOOD FOR THE WALLET	26
CHAPTER 3: EATING OUR WAY TO A SUSTAINABLE FOOD SYSTEM	27
3.1 THE GROWING TREND OF SUSTAINABLE FOOD AND DIETS	28
3.2 BETTER DIETS – A MEMBER STATE COMPETENCE WITH EU SUPPORT	30
3.3 GOVERNMENT ACTION ON THE INTERFACE OF HEALTHY AND SUSTAINABLE DIETS	31
CHAPTER 4: BARRIERS AND OPPORTUNITIES FOR SUSTAINABLE DIETS – WHAT CAN GOVERNMENTS DO?	35
4.1 KEY OPPORTUNITIES FOR SUSTAINABLE DIETS	37
4.2 KEY BARRIERS TO SUSTAINABLE DIETS	38
4.3 SUPPORTING POLICY TOOLS TO FILL THE GAPS	39
4.3.1 DEVELOPING A MORE COHERENT AND INTEGRATED POLICY FRAMEWORK	40
4.3.2 TARGETS AND DATA	41
4.3.3 SHARING BEST PRACTICE	41
4.3.4 SUPPORTING COMMON RESEARCH AND DEVELOPMENT PRIORITIES	42
CHAPTER 5: SPECIFIC POLICY MEASURES IDENTIFIED IN LIVEWELL FOR LIFE	43
5.1 EDUCATION	44
5.2 GREEN PUBLIC PROCUREMENT	46
FINAL RECOMMENDATIONS	49
ANNEX 1: SUMMARY OF POLICY RECOMMENDATIONS TO ENCOURAGE MORE SUSTAINABLE FOOD CHOICES	52

ACRONYMS AND ABBREVIATIONS

- **BCFN:** Barilla Center for Food & Nutrition
- **CLITRAVI:** Liaison Centre for the Meat Processing Industry in the European Union
- **COPA-COGECA:** European Farmers – European Agri-Cooperatives
- **DG SANCO:** Directorate General for Health and Consumers
- **EC:** European Commission
- **EFSA:** European Food Safety Agency
- **ESD:** Education for Sustainable Development
- **EU:** European Union
- **FBDG:** Food-Based Dietary Guidelines
- **HLF:** High-level Forum for a Better Functioning Food Chain
- **IEEP:** Institute for European Environmental Policy
- **INRA:** National Institute of Agronomic Research
- **IPCC:** Intergovernmental Panel on Climate Change
- **LiveWell for LIFE:** LiveWell for Low Impact Food in Europe
- **NGO:** Non-Governmental Organisation
- **PDO:** Protected Designation of Origin
- **PEF:** Environmental footprint of Products
- **PGI:** Protected Geographical Indication
- **PNA:** Programme National Alimentation
- **PNNS:** National Health and Nutrition Programme
- **SCP:** Sustainable Consumption and Production
- **SEMCO:** Swedish Environmental Management Council
- **SLV:** Swedish National Food Agency
- **TSG:** Traditional Specialities Guaranteed
- **UK:** United Kingdom
- **UN FAO:** Food and Agriculture Organisation of the United Nations
- **UNESCO:** United Nations Educational, Scientific and Cultural Organisation
- **VAT:** Value-Added Tax

FOREWORD

BY OLIVIER DE SCHUTTER

LiveWell for LIFE addresses an issue of major importance to society: how can we change our food consumption patterns to achieve lower environmental impacts and better health that will benefit us and our planet?

The challenge is considerable. Industrialised food systems have become a major driver of climate change. It takes huge amounts of energy to produce fertilisers and to process, package, transport and preserve food.

Industrialised food systems also encourages diets that rely heavily on processed or ultra-processed foods. This leads to a rapid growth of non-communicable diseases such as type 2 diabetes, gastro-intestinal cancers or heart diseases. Some 7% of the healthcare budgets of the EU member states are spent on treating obesity-related diseases, and one in three children between six and nine years of age are overweight or obese.

These negative environmental and health impacts are now well understood. But the mainstream food systems are inert. Their ability to resist reform is commensurate with the amplitude of the problems they cause. Barriers to change include investment costs sunk in technologies and infrastructures that reward 'bigness' and economies of scale, along with the economic and political weight of vested interests.

Perhaps even more importantly, lifestyles and diets have co-evolved with the mainstream food system. We are now accustomed to spending less and less money on feeding ourselves. We have rushed lifestyles, multiple shifts, and long commuting times that make it impossible to find leisure time to cook or even to buy healthy foods. We often live in single-parent households, and the family meal is an endangered cultural species.

Convenience foods have become exactly what their name says – foods perfectly tailored to a civilisation that has forgotten about the centrality of food to our well-being. A civilisation that sees food increasingly as a sort of medicine rather than as part of what makes us fully social human beings.

The challenge is considerable, but it can be met.

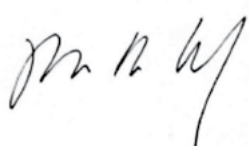
First, because the crisis is multidimensional and affects both the environment and public health, new alliances are emerging. Environmental NGOs team with the public health community to demand change. Politicians from the left who care about climate change join forces with those from the right whose main concern is to balance the public budget, and who fear the exploding costs of healthcare. Both civil society and politicians understand the need to ground policies on science, rather than on ideology or on established routines that perpetuate business as usual.

Second, food is central to our lives. So each one of us can make a difference. Consumers are becoming aware of their power, and large retailers now understand that the public want something other than cheap calories. We want food that nourishes, that sustains health, that is sustainably produced, and that provides fair wages to workers along the food chain.

Food chains that were supply-driven are now increasingly driven by consumer demand, which in turn has become more complex. Social innovations, moreover, are developing in a number of directions. They include community-supported agriculture and short food chains, responsible sourcing policies from schools and public administrations, urban vegetable gardens, and a catering sector that now delivers not just food – but also health, social justice and a sustainable environment.

Ultimately, change is a question of power. How much will these changes in consumer practices matter? To what extent will these social innovations, and the emergence of alternative food systems, challenge the mainstream? Will future agrifood policies continue to be designed behind closed doors, for the benefit of a few lobbies, or will they be shaped through the participation of citizens, from the local level of the food policy council or the school board to the next reforms of the Common Agricultural Policy?

The report prepared by *Friends of Europe* and WWF is a major contribution to this transformation of the political economy of food systems. It provides the tools. It makes a range of suggestions that, if implemented, would go a long way towards improving health outcomes of food systems in the EU while at the same time reducing their environmental impacts. I am confident that it will remain a lasting reference to guide the efforts of all those who seek to invent new solutions, and who demand change.



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FOREWORD

BY TONY LONG

In 2011, *Friends of Europe* and WWF together decided to tackle two of the largest policy challenges currently facing the planet: malnutrition and climate change. The rise of the so-called Western diet has a great share of responsibility in both these issues. Moreover, the health effects of obesity today claim more lives than hunger does. Next year will be crucial for both issues. In September 2015, heads of state will gather in New York to decide on the Post-2015 development goals. Fighting malnutrition will be at the centre of the goals. A couple of months later in Paris, world leaders will decide how to step up the global efforts to combat climate change.

When WWF and *Friends of Europe* launched the LiveWell for LIFE project three years ago, we knew that business as usual food consumption in the EU was not a viable option from both a health and environment perspective. However, there was uncertainty over what could replace it.

From the outset, LiveWell set the direction of where we needed to be heading: consume less, consume better, tread more lightly on the planet and live better and healthier lives. They're straightforward messages. But today, unfortunately, the optimism of this vision is not so clearly apparent among European governments. Other policy priorities overshadow this agenda, despite the large business and economic potential of encouraging more healthy and sustainable diets.

But the LiveWell project has started a policy debate that's gaining momentum. European citizens are increasingly making the link between their own lifestyles, their personal health, and the future of the planet. They're expecting business leaders and governments to make sure the conditions for wiser food consumption are met. This report bears testimony to that increasing awareness. I hope by reading this, your own journey down these new thought paths will be enhanced.



Tony Long

Director of WWF European Policy Office and member of the LiveWell for LIFE steering committee.

EXECUTIVE SUMMARY

LiveWell for Low Impact Food in Europe (LiveWell for LIFE) was launched in 2011 with the aim of contributing towards a reduction in greenhouse gas emissions from the European Union (EU) food supply chain to below 1990 levels by 2020 – in line with international agreements.



EXECUTIVE SUMMARY

Funded by the European Commission (EC) LIFE+ programme, LiveWell for LIFE is a ground-breaking project that not only set out to show how low carbon diets can help achieve a reduction of at least 25% in greenhouse gas emissions from the EU food supply chain but also showed how these can be healthy, nutritious and affordable. The project also aimed to influence policies and practices to ease the adoption of low-carbon diets in the EU – and in particular in our pilot countries: France, Spain and Sweden – and ultimately, to put the issue of sustainable diets on the EU policy agenda.

LiveWell for LIFE's work is based on collaboration with a Network of European Food Stakeholders made up from policy-makers, representatives of the retail industry, farmers, food manufacturers, the health sector, academics and civil society, who gave input at each stage of the project. Together, we successfully did the following:

1. We demonstrated, through the development of the LiveWell Plate, that by making some surprisingly simple tweaks to daily eating choices, those choices would improve national health, remain affordable and reduce the impact of our eating habits on the climate.
2. We identified a list of 24 key opportunities for and barriers to the adoption of sustainable healthy diets in the EU which consumers, policy makers and business may experience.
3. We found a range of available and feasible EU policy options to encourage a shift towards more sustainable and low carbon diets.
4. We carried out an economic impact assessment of the adoption of sustainable diets by 2020 according to various scenarios.
5. We asked our Network of European Food Stakeholders to develop pathways towards the adoption of sustainable diets.

The Network of European Food Stakeholders' input, combined with research carried out by LiveWell for LIFE, helped identify policies and private initiatives which could make sustainable diets happen in the EU.

We call on the entire food chain to support these eight policy recommendations to help encourage healthy and sustainable diets:



1. Implement no-regret policies: we believe the following three policy options will have high impact, be politically acceptable and cost-effective. Rolling them out should be a priority.



a) **Revise national dietary guidelines** to reflect sustainability and greenhouse gas mitigation objectives: we've shown that there are large overlaps between healthy and sustainable diets. But there can also be clear trade-offs, and eating healthy food does not always benefit the climate. National governments should develop policies to give more balanced, integrated dietary recommendations on healthy and sustainable diets.



b) **Strengthen Green Public Procurement:** we want to make Green Public Procurement in food and catering mandatory. The European public sector is a powerful force in the food chain, creating new markets and fostering an economy of quality. A thorough revision of the EU's Green Public Procurement guidelines should be a priority, with the ultimate aim to set more binding minimum environmental standards for public food procurement.



c) **Support food education:** we want to find ways to reconnect people with the origins of their food so they can make wiser choices. Governments must make sure activities such as food growing, farm visits and cooking classes are available in all schools and not dependent on local initiatives or tuition fees. School food policies at national and EU levels should give children healthy and sustainable lunches. We need more education to encourage healthy eating habits, food diversity and environmental sustainability.



2. Upgrade agricultural and nutrition policies to one sustainable

food policy: we think environmental, economic and social values should have more influence on food production and consumption. Governments should consult with a wide range of food stakeholders to develop a shared long-term vision of what constitutes a sustainable food system. Ideas include better integration of food-related policies (in particular between agriculture, the environment and health) and working out what EU institutions, national and local governments do best and how they can work better together.



3. Strengthen preventive action on diet-related non-communicable

diseases: we've found that healthy and sustainable diets can be mutually reinforcing, so maintaining and strengthening the existing preventive action on obesity and overweight would be good for both public health and the environment.



4. Make better use of economic governance: we want a greater emphasis on economic policies, as well as information. The user and polluter pays principles must be better enforced in food policy. The environmental and health cost of food production and consumption should be reflected in macro-economic governance.



5. Competition policy should not eclipse sustainability objectives: we want the EC and member states to find agreement on how the EU's competition policy can provide a fair market environment. We also want them to set predictable frameworks for minimum standards and stimulate front-runners on health and environment.



6. Seek local-global synergies: we realise that achieving sustainable food consumption which also improves nutrition and combats climate change is a global challenge, but we want to think about how successful initiatives can be replicated outside Europe. EU member states also need to make good use of energy at local levels and ensure it is directed towards international objectives on development, health and nutrition and environmental sustainability.



7. Ensure a supportive, cohesive policy environment: we want governments to put policy measures in place to support informed action for and monitoring of progress by all stakeholders. The EC should use its existing stakeholder platforms to swap best practices between member states and other stakeholders. Existing indicators could give better insights on whether diets are actually shifting in more healthy and sustainable directions.



8. Ensure food chain accountability: we want industry to be an important partner in encouraging more healthy and sustainable diets. Voluntary commitments should be underpinned by realistic targets. If these are not met, governments need to be ready to step in with regulation.

For more details of these recommendations, please refer to our full report.

CHAPTER 1: LIVEWELL FOR LIFE – AIMS AND ACHIEVEMENTS

LiveWell for LIFE plays a key role in the European sustainable diets debate. The project looks at health, nutrition, carbon and affordability and shows how low-carbon, healthy diets can help us achieve a reduction in greenhouse gas emissions from the EU food supply chain.



CHAPTER 1:

LIVEWELL FOR LIFE –

AIMS AND ACHIEVEMENTS

The project contributes to this long-term vision by showing what sustainable diets look like for EU Member States, paving the way for a conducive policy environment, developing tangible pathways for sustainable diets and promoting this widely across Europe. This ground-breaking project works with the Network of European Food Stakeholders – policy-makers, representatives of the retail industry, farmers, food manufacturers, the health sector, academics and civil society who provided input at each step of the project.

LiveWell for LIFE's work has resulted in valuable research around what sustainable healthy diets may look like. We've also pinpointed a set of policy recommendations so policy makers, businesses, consumers and other actors of the food chain can promote and support healthy, sustainable diets by using measures that are easy to implement, are cost-effective, are widely acceptable and will work anywhere in the EU.

LiveWell for LIFE and the Network of European Food Stakeholders successfully undertook the following five actions:

1. LiveWell Plates

LiveWell for LIFE showed that by making some surprisingly simple tweaks to daily eating choices, we would improve national health, remain affordable and reduce the impact of our eating habits on the climate. We demonstrated this by developing a LiveWell Plate – built on the concept of the existing British nutritional tool, the Eatwell Plate. The LiveWell Plate is a visual presentation of a healthy and sustainable diet. It illustrates the types and portions of food an average adult needs to have for a low-carbon diet that's nutritionally sound.

Before this project, WWF-UK developed a LiveWell Plate for the UK. To make sure that the LiveWell Plate would show climate-friendly diets that would also be widely acceptable and easy to adopt, WWF-UK wanted to offer something affordable to consumers, in line with national nutritional recommendations and culinary preferences. Research showed that a change towards low-carbon, healthy diets was achievable and would help the UK meet its targets for the reduction of greenhouse gas emissions. LiveWell for LIFE subsequently wanted to find out whether this positive outcome could be replicated in European countries with different food preferences.

We developed three more LiveWell Plates to help determine low-carbon diets in Sweden, France and Spain (the pilot countries). These also showed that affordable low-carbon diets, in line with national nutritional recommendations and culinary preferences, could be achieved. More information about the work we carried out to develop the LiveWell Plates is available in chapter 3.

2. Barriers and opportunities

LiveWell for LIFE identified a list of 24 key opportunities for and barriers to the adoption of sustainable healthy diets in the EU which consumers, policy makers and business may experience. This research was carried out through a literature review between December 2012 and January 2013, covering publications by governments and international bodies, business organisations and civil society groups. This research was added to by members of the LiveWell Network of European Food Stakeholders through interviews, questionnaires and discussions during the second LiveWell for LIFE workshop, held in March 2013 in Brussels.

Habits, limited knowledge and the perception by consumers that sustainable healthy diets cost more than conventional diets were identified as key barriers to the adoption of sustainable diets. On the other hand, opportunities included the potential to save money on food, meeting societal expectations and investing in one's health. The finding of our research can be found in our report *Adopting healthy, sustainable diets: key opportunities and barriers*¹. A summary of our findings is available in chapter 5.



3. Public policy options

LiveWell for LIFE appointed the Institute for European Environmental Policy (IEEP) to carry out a study of public policy options that would support a shift towards more sustainable diets in Europe. Its work, carried out with bxl-law, aimed to show the range of EU policy options that are both available and feasible to encourage a shift towards more sustainable and low carbon diets. It had a specific focus on short-term policy options, but also highlighted those relevant in the medium to longer term. IEEP identified a list of policies that could be applied at EU level as well as a list of specific actions that ought to be carried out for these policies to be successful. IEEP's findings were:

- A mix of policies are needed to address the many influencing factors if we're to bring about a shift towards sustainable diets.
- The issues surrounding sustainable consumption in relation to food are politically sensitive.
- Food cost issues are a major and growing concern in much of the EU.
- People don't agree on what 'sustainable' food is. The lack of an agreed definition of what constitutes sustainable food makes it difficult to start any initiatives to promote more sustainable consumption patterns.
- Because food sustainability is affected by so many different factors, it's difficult to put these policy measures in place, and the risk of unintended perverse effects is high.
- There have been few assessments on how well different policy measures work to change the sustainability of consumption, production and supply.

The full list of policies identified by IEEP can be found in Annex 1. Key policies are also reviewed in chapter 5.

4. Economic impact assessment

LiveWell for LIFE appointed Civic Consulting to carry out a socio-economic impact assessment of the adoption of sustainable diets by 2020 according to various scenarios. Building on LiveWell for LIFE's two previous reports: *A balance of healthy and sustainable food choices for France, Spain and Sweden* (2012) and *Adopting healthy, sustainable diets: key opportunities and barriers* (2013), Civic Consulting's economic modelling looked at impacts relating to the food chain, climate and obesity-related health problems, and tested the practicality of some of the key policy options in the EU and in the three LiveWell pilot countries. The key findings were:

- The adoption of diets meeting the LiveWell Plate recommendations by EU consumers could lead to significant benefits in terms of a reduction of environmental impacts, specifically in relation to greenhouse gases and nitrogen balance and improvements in public health.

¹ LiveWell for LIFE, 2013. *Adopting healthy, sustainable diets: key opportunities and barriers* Available online at <http://livewellforlife.eu/opportunities-and-barriers> [Accessed October 2014].

- To encourage healthy and sustainable diets in the EU, developing national sustainable food strategies using a mix of relevant policies is the most important and feasible of the options assessed.
- An environmental impact labelling scheme for food products could be part of any national sustainable food strategy.
- Teaching people about food, nutrition and the environment is key. And it could be cheaper than other options.
- There's no simple answer to the question of whether the benefits of taxation measures outweigh the challenges, whether that's a higher tax rate on unhealthy foods or those with higher environmental impacts, or a reduced VAT rate on healthy food with low environmental cost. A comprehensive impact assessment is needed on any specific taxation measures planned.
- We need further research to find out the critical determinants of healthy and sustainable diets.

5. Developing pathways

We asked our Network of European Food Stakeholders to develop pathways towards the adoption of sustainable diets. This work was done both through a series of meetings at national level in the pilot countries, and during our third and final workshop held in Brussels in June 2014. Workshop participants chose up to four initiatives that they considered most promising, in the light of their experience, knowledge and based on the findings of the research carried out by IEEP and Civic Consulting. They then developed a roadmap to find a course of action leading to their realisation in around 2020. Information about these pathways and key policies can be found in chapter 6.

When LiveWell for LIFE started, there was little discussion about sustainable diets among EU policy-makers and EU food businesses, but since then a number of important European actors have taken a great interest in this issue. Here are a few examples of critical developments as a result of our work, which have been helped by LiveWell's findings:

1. The EC published a consultation on the Sustainability of the Food System which ran from July to October 2013. The consultation, which was expected to have a restricted focus on food waste, also covered the issue of sustainable food consumption. The Communication is yet to be published at time of this report going to print.
2. In autumn 2013, members of the LiveWell team participated in the European Parliament launch of a cross-party Steering Group on Sustainable Food – 'EU Food Sense: your right to the right food'. This is important because it's the first group on this topic at the European Parliament. EU Food Sense "will push to establish a set of guiding principles on a sustainable diet, with a strong focus on reducing meat consumption as the most resource-intensive food. EU Food Sense will facilitate debate with the other European institutions, national parliaments and a growing number of NGOs active in this field"².
3. In early 2014, the EC's High-level Forum for a Better Functioning Food Chain (HLF) developed an ambitious food chain stakeholder declaration called 'Actions towards a more sustainable European food chain'. The declaration, supported by a number of influential business organisations, includes consumption as a cross-cutting priority and gives strong support for including sustainable food consumption in the EC Communication 'Building a Sustainable Food System for Europe'.

The following chapters give more detail about sustainable diets and the work carried out in the LiveWell project. It is now up to all in the EU food chain – including policy-makers at national and EU levels and representatives of civil society – to consolidate the outputs of LiveWell for LIFE and take forward the project's recommendations, found in chapter 6.

² EU Food Sense. Available online at <http://www.eufoodsense.com/background/4581192649>
[Last accessed October 2014]

CHAPTER 2: DEMONSTRATING THE BENEFITS OF HEALTHY AND SUSTAINABLE DIETS

After the Rio+20 Summit, governments acknowledged in *The Future We Want* that: “Food security and nutrition has become a pressing global challenge and, in this regard, we further reaffirm our commitment to enhancing food security and access to adequate, safe and nutritious food for present and future generations.”¹³ There are many reasons as to why food security and nutrition are becoming a pressing global challenge.



CHAPTER 2: DEMONSTRATING THE BENEFITS OF HEALTHY AND SUSTAINABLE DIETS

First is the UN's prediction that the world population will reach 8.92 billion people in 2050, before peaking at 9.22 billion in 2075⁴. This, coupled with the worldwide emergence of a growing middle class, who aspire to Western lifestyles – particularly Western diets – will drive competition for scarcer resources such as land and water. Food, water and energy security are inextricably linked, and actions in one area will usually affect one or both of the others. With the expansion of a global middle class, trade-offs between these three objectives will be more frequent and pronounced. Agriculture plays a pivotal role, as it is already responsible for 70% of global freshwater use (more than twice the 23% share used by industry), 30% of primary energy use, and 24% of human-generated greenhouse gas emissions⁵.

Increasing agricultural yields – including food outputs – would help feed the ever-growing world population. But the negative environmental impacts that come with conventional agriculture – particularly soil erosion and climate change – could make our food system dramatically more vulnerable and result in more volatile food prices.

Finally, it would not necessarily mean fairer distribution of that food. Today, while some 805 million people in the world don't have enough food to lead a healthy active life⁶, more than 1.4 billion adults aged 20+ are overweight because they eat too many calories⁷. Diabetes, one of the strongest indicators of poor dietary health, doubled between 1990 and 2010. According to the World Health Organisation, diabetes will be the seventh leading cause of death in 2030⁸. Moreover, research commissioned by the Food and Agriculture Organisation of the United Nations (UN FAO) found that a third of all human food produced goes to waste⁹.

All these issues suggest an answer that goes beyond the traditional paradigm of simply producing more to feed the world. We need a combination of sustainable food production and consumption for a fairer and more resilient food system.

FAO defines sustainable diets as: "Diets with low environmental impacts, which contribute to food and nutrition security and to healthy life for present and future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable; nutritionally adequate, safe and healthy; while optimising natural and human resources."¹⁰

This definition guided the work of LiveWell for LIFE by showing the important benefits that could result from the widespread adoption of healthy and sustainable diets. LiveWell for LIFE produced a set of six principles aiming to facilitate the adoption of diets which help curb climate change, are healthy, not wasteful and encourage the consumption of foods produced in line with high social and environmental standards.

This chapter summarises some of the key findings on the four key conditions we set ourselves to test the viability of the LiveWell Plates: reducing climate impacts, reducing health impacts, conforming to national food preferences and affordability.

³ *The Future We Want*. Available online at <http://www.uncsd2012.org/content/documents/727The%20Future%20We%20Want%2019%20June%201230pm.pdf> [Last accessed October 2014].

⁴ United Nations Department of Economic and Social Affairs, *World Population to 2300*. Available online at <http://www.un.org/esa/population/publications/longrange2/WorldPop2300final.pdf> [Last accessed October 2014].

⁵ David Molden, *Water for food Water for life, A comprehensive Assessment of Water Management in Agriculture*. Available online at <http://www.routledge.com/books/details/9781844073962/> [Last accessed October 2014].

⁶ FAO, IFAD and WFP. 2014. *The State of Food Insecurity in the World 2014. Strengthening the enabling environment for food security and nutrition*. Rome, FAO. <http://www.fao.org/3/a-i4030e.pdf> [Last accessed October 2014].

⁷ WHO media centre. 2008 figure – *WHO Obesity and overweight, Fact sheet N°311*, Updated August 2014. Available online at <http://www.who.int/mediacentre/factsheets/fs311/en/> [Last accessed October 2014].

⁸ WHO media centre. *Diabetes, Fact sheet N°312*, Updated October 2013. Available online at <http://www.who.int/mediacentre/factsheets/fs312/en/> [Last accessed October 2014].

⁹ FAO and Messe Düsseldorf lead the SAVE FOOD - Global Initiative on Food Loss and Waste Reduction <http://www.fao.org/3/a-i4068e.pdf>

¹⁰ FAO, *Sustainable diets and Biodiversity, Directions and solutions for policy, research and actions. Proceedings of the International Scientific Symposium Biodiversity and sustainable diets united against hunger*, 3–5 November 2010. FAO Headquarters, Rome <http://www.fao.org/docrep/016/i3004e/i3004e.pdf>

LiveWell for LIFE

6 principles

1 Eat more plants



3 Waste less food



4 Moderate your meat consumption, both red and white



2 Eat a variety of foods



6 Eat fewer foods high in fat, salt and sugar



5 Buy food that meets a credible certified standard



CHAPTER 2.1: GOOD FOR THE PLANET

The way we produce and consume food has a major impact on our ecological footprint and the fact that we're exceeding the environment's carrying capacities. The three planetary boundaries humanity has most boldly crossed – biodiversity loss, reactive nitrogen pollution and climate change – are all inextricably linked to our food systems¹¹.

The LiveWell for LIFE project set out to support a reduction in greenhouse gas emissions from the EU food chain: In April 2014 the IPCC warned about the significant twin challenge for the food and agriculture sectors in climate change¹². They both need to curb major contributions to emissions, as well as adapt to the often negative effects of climate change in many regions.

The IPCC stressed the importance of greater efficiency in food consumption, stating: "Demand-side measures, such as changes in diets and reductions in losses in the food supply chain, have a significant, but uncertain, potential to reduce greenhouse gas emissions from food production (medium evidence, medium agreement)."

In Europe, food and drink consumption contributes to 15% of the EU's greenhouse gas emissions originating from national consumption¹³. The potential of better diets to produce lower emissions are also well-documented – a 2012 EC study found that if all Europeans followed healthy diet guidelines, greenhouse gas emissions would be reduced by 30% compared to current consumption¹⁴.

By developing the LiveWell Plates, we showed that a 25% reduction of greenhouse gas emissions compared to the current diet can be achieved in France, Spain and Sweden with relatively small changes in the diet. In all three countries, consumption levels of meat and foods high in salt, fat and sugar are above healthy diet recommendations. Simply reducing meat consumption to healthy levels alone would achieve nearly all of the emission reductions needed. There is scope for further reduction – for all three countries, reductions of up to 70% were achievable while still meeting national dietary guidelines¹⁵. But, as the LiveWell Plates had to respect current dietary preferences and food cultures, we didn't explore these extra reductions further, as such diets would only appeal to a small percentage of people. It does show the striking potential environmental contribution of more plant-based eating.

Challenged by its stakeholder network to research other diet-related environmental pressures, LiveWell for LIFE also gathered evidence on how diets impact on other natural resources, such as land and water. Like greenhouse gas emissions, we found a large difference between foods from animal and plant origin. Eating animal products accounts for 46% of the EU's total water consumption. This is more than the 37% needed to produce all the crops for human consumption combined and over 15 times that of domestic water consumption (3%)^{16 17}.



¹¹ Rockström, J., 2009 A safe operating space for humanity. *Nature*, 23 September, 461, pp 472–475 (24 September 2009)

¹² IPCC, 2014. Climate change 2014 - Mitigation of climate change. Summary for Policy Makers SPM [online] Available at: <http://www.ipcc.ch/report/ar5/wg3/> [Accessed 10 October 2014].

¹³ And likely significantly higher if emissions from indirect land use change would be better accounted for,

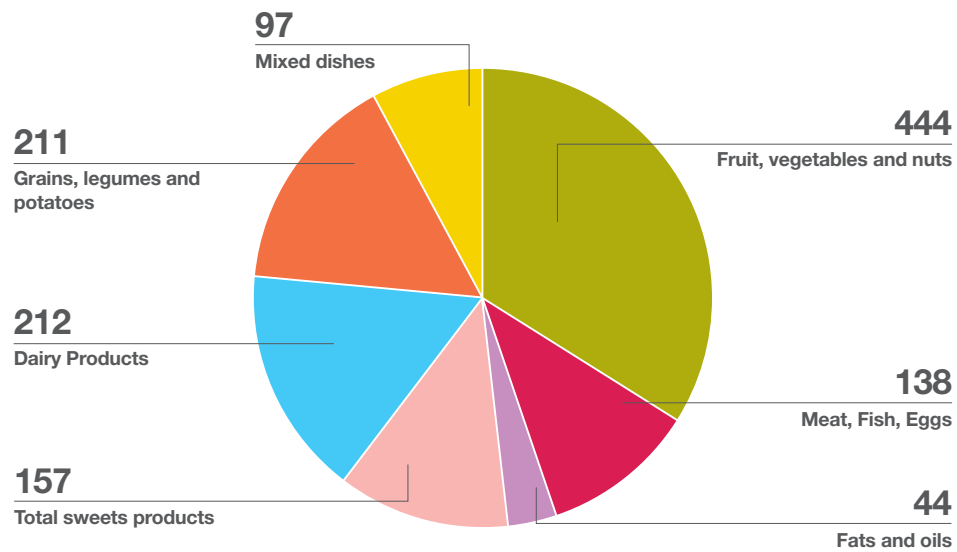
¹⁴ http://ec.europa.eu/clima/policies/roadmap/studies_en.htm

¹⁵ LiveWell for LIFE, 2012. *A balance of healthy and sustainable food choices for France, Spain, and Sweden*. <http://livewellforlife.eu/livewell-plate>

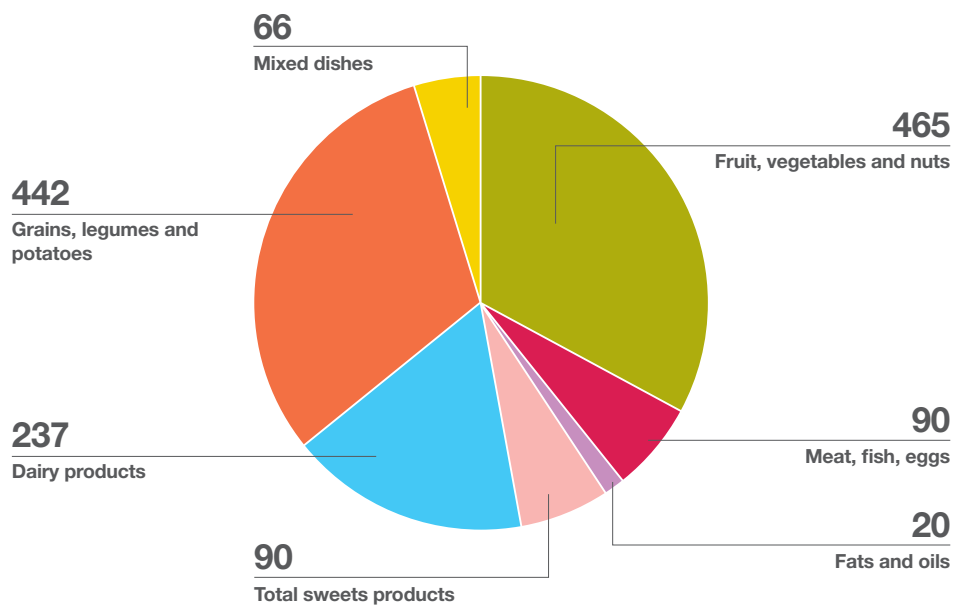
¹⁶ Vanham, Mekonnen & Hoekstra, 2013. The water footprint of the EU for different diets. *Ecological Indicators*, September, 32, pp1–8 / <http://www.sciencedirect.com/science/article/pii/S1470160X13000940> / This study also estimates that a European-wide adoption of healthy diets would reduce water demand compared to the current diet by 23%.

¹⁷ Please note that the water footprint for WWF includes ecological flows and qualitative impacts of water consumption, while this study only addresses quantitative water consumption. Hence, this figure shows the 'shoe size' but not its local impact.

Current consumption in France



LiveWell Plate in France



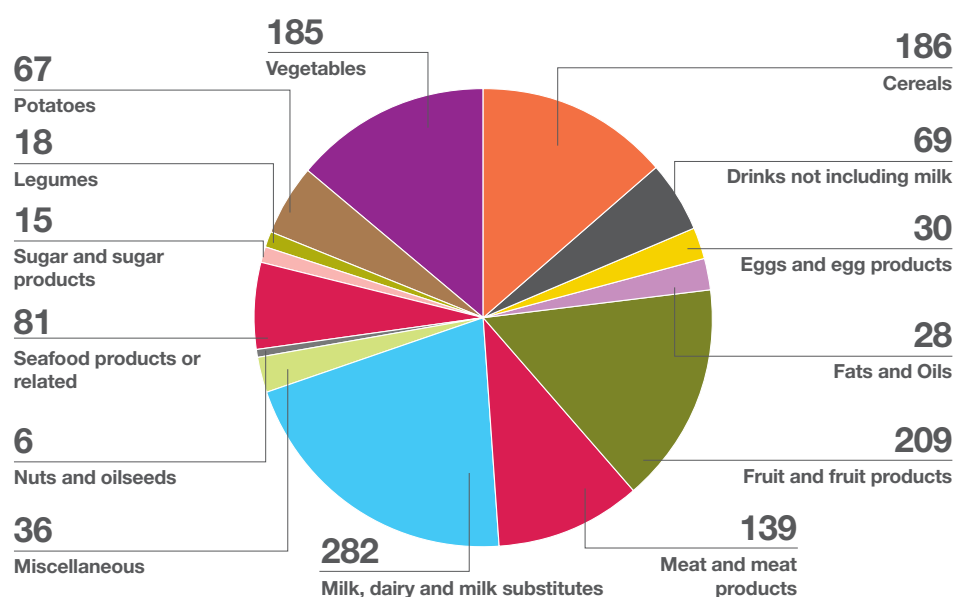
Unit: grams (per person per day)

Carbon emissions

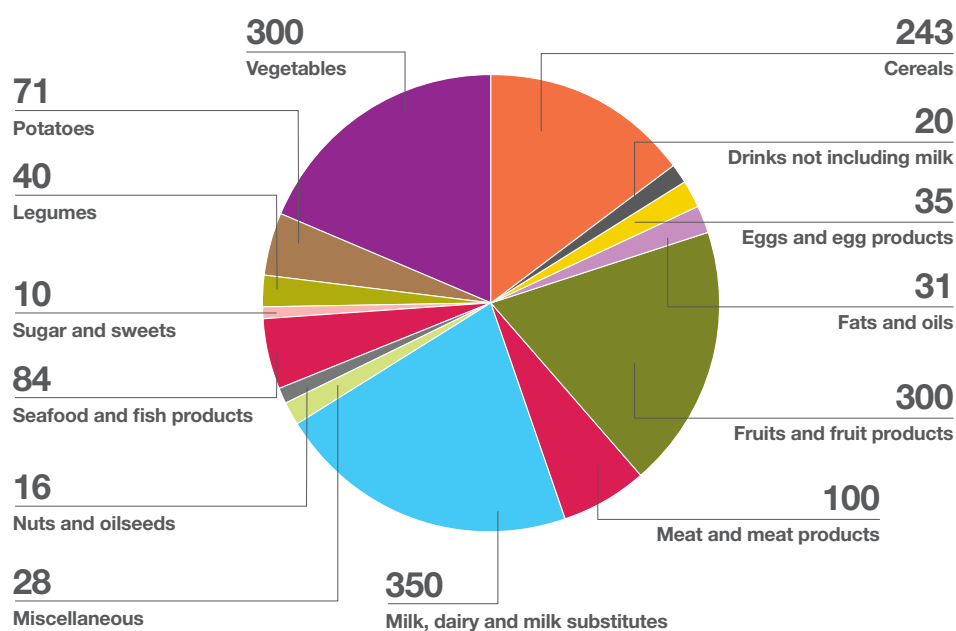
The table shows the greenhouse gas emissions for the LiveWell Plate compared to those of the current average diet in France.

Country	Current average diet gCO ₂ equivalent/day	LiveWell Plate gCO ₂ equivalent/day
France	3,478	2,609

Current consumption in Spain



LiveWell Plate in Spain



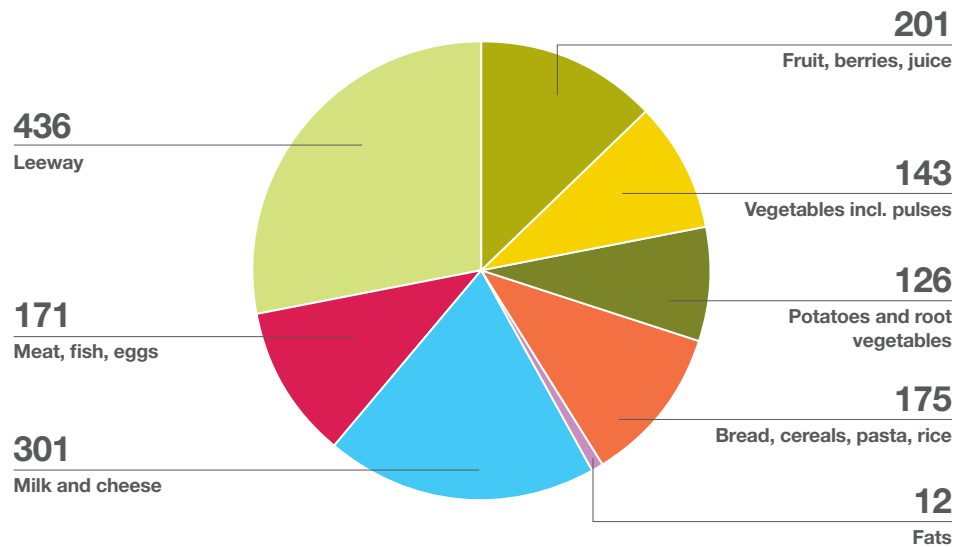
Unit: grams (per person per day)

Carbon emissions

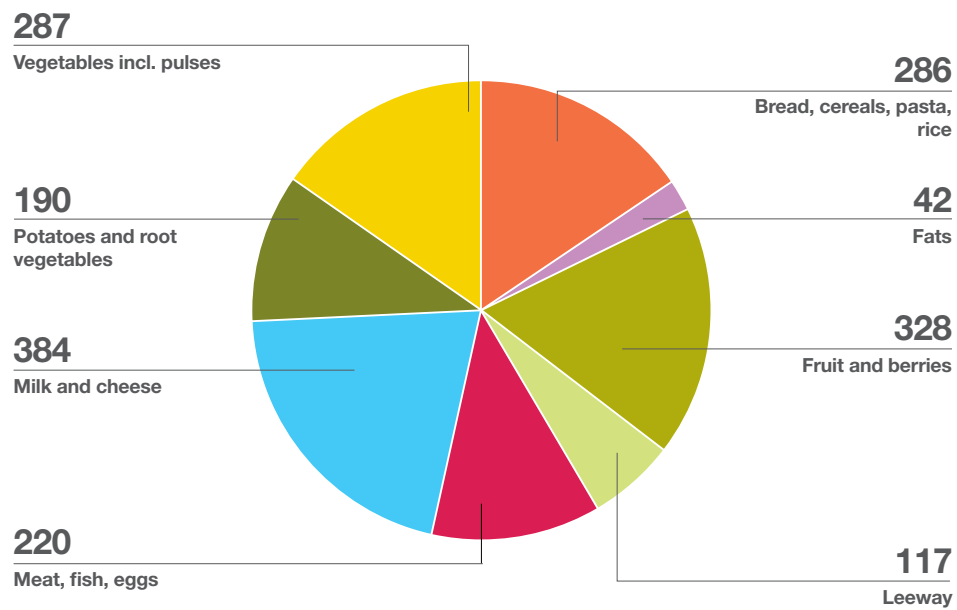
The table shows the greenhouse gas emissions for the LiveWell Plate compared to those of the current average diet in France.

Country	Current average diet gCO ₂ equivalent/day	LiveWell Plate gCO ₂ equivalent/day
Spain	3,753	2,710

Current consumption in Sweden



LiveWell Plate in Sweden



Unit: grams (per person per day)

Carbon emissions

The table shows the greenhouse gas emissions for the LiveWell Plate compared to those of the current average diet in France.

Country	Current average diet gCO ₂ equivalent/day	LiveWell Plate gCO ₂ equivalent/day
Sweden	5,728	4,295

Figure 1 below shows that we in the EU eat on average 70% more protein than we need for a healthy diet, and 60% of that comes from animal sources. Animal products are hugely important in achieving sustainable diets. A recent study showed that halving the amount of meat, dairy products and eggs eaten in the EU would give a 40% reduction in nitrogen emissions, a 25-40% reduction in greenhouse gas emissions, and 23% per capita less use of cropland for food production¹⁸.

Intake of proteins in EU27, 2007

Left graph: The difference in consumption of animal protein between the Member States is more than a factor of two.

Right graph: Total protein intake shows smaller differences but is higher than recommended, in all Member States

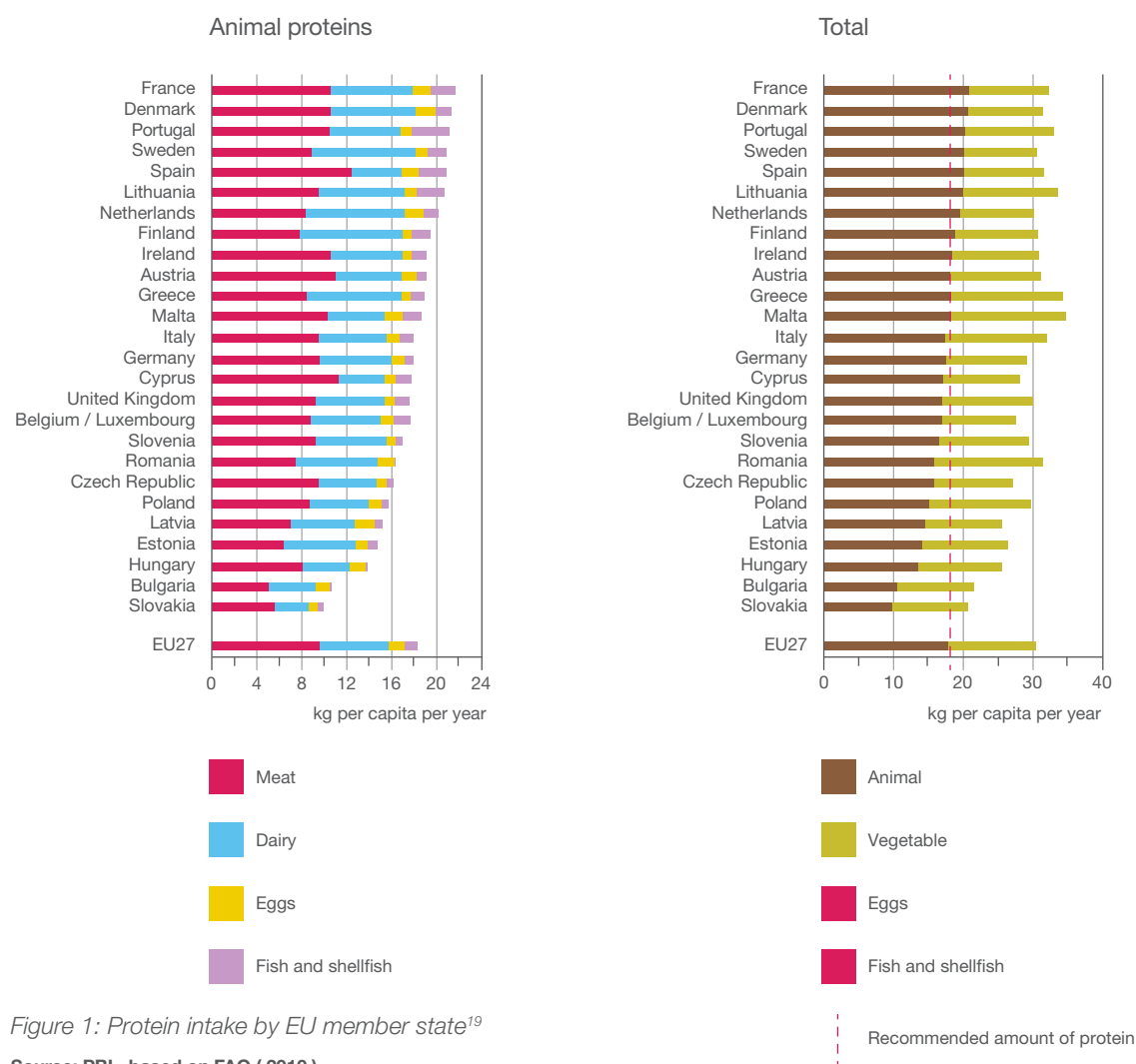


Figure 1: Protein intake by EU member state¹⁹

Source: PBL, based on FAO (2010)

¹⁸ Westhoek et al, 2014. Food choices, health and environment: Effects of cutting Europe's meat and dairy intake. *Global Environmental Change*, May, 26, pp 196–205 / <http://www.sciencedirect.com/science/article/pii/S0959378014000338>

¹⁹ Figure taken from: Westhoek et al, 2011. *The protein puzzle. The consumption and production of meat, dairy and fish in the European Union.* / The Hague: Dutch Environmental Assessment Agency (PBL).

CHAPTER 2.2: GOOD FOR HEALTH



LiveWell for LIFE's work was guided by the definition of sustainable diets agreed by the FAO. Others, such as the Barilla Centre for Food and Nutrition and the Health Council of the Netherlands, also recognise the need to consider both environmental pressure and human health when devising sustainable diets.

Through its research, LiveWell for LIFE succeeded in devising a dietary model that is healthy in that it matches national nutritional guidelines. As such, while the LiveWell Plates developed for France, Spain and Sweden showed a reduction in the total amount of meat consumed, they nevertheless kept enough meat and/or fish in the diet to comply with nutritional recommendations (and to maintain some traditional dishes and meal patterns – there is more on this in chapter 2.3).

Crucially, the carbon and health benefits of dietary patterns like the LiveWell Plate – more plant, wholegrain, legumes, vegetables, fruit and plant-derived meat substitutes and less meat, dairy and processed foods – are twofold:

- They're associated with a lowered risk of cardiovascular disease and also have a smaller carbon footprint. From a health perspective, it's not essential to avoid meat and dairy products entirely. It doesn't appear to be necessary even when reducing greenhouse gas emissions by 25%.
- Consuming fewer sugary drinks, sweets, cakes and snacks means fewer calories are eaten. This helps to achieve a healthy body weight, which in turn reduces the risk of diabetes, cardiovascular disease, and certain forms of cancer.

Between October 2013 and March 2014, Civic Consulting carried out a socio-economic impact assessment of the adoption of sustainable diets by 2020 according to two scenarios. In the first scenario, the LiveWell Plate is modelled as taken up by an extra 30% of the EU population, and in the second by 70% of the EU population. Both of these are compared to a business-as-usual reference scenario²⁰.

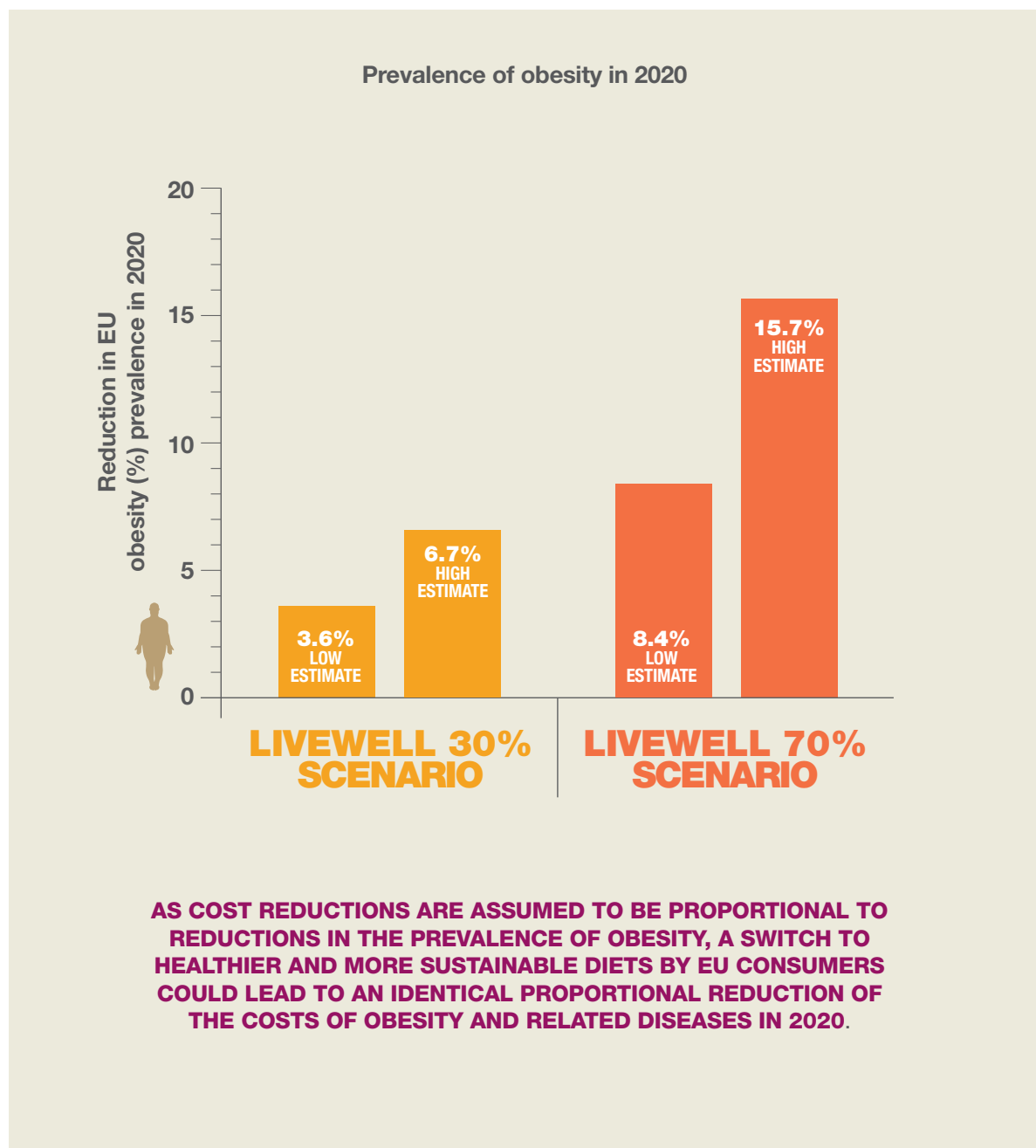
Civic Consulting's research predicts that, assuming a continuation of current trends in the reference scenario, the costs of obesity and related diseases will amount to €9.2 billion in France, €6.5 billion in Spain and €4.0 billion in Sweden in 2020. For the whole of the EU these costs are expected to range between €180.2 billion and €204.4 billion depending on whether the lower or the higher estimates of EU obesity levels in 2020 are used. For comparison purposes, the 2015 annual EU budget is €142bn (2014 figures).²¹

²⁰ In the EU, obesity could affect 21% of the EU population in 2020, based on a linear extrapolation of the trends in the prevalence of obesity observed between 2008 and 2010 (the latest year for which data is available). But the more recent data collected in the LiveWell pilot countries suggest that the progression of obesity has slowed in recent years. For example, the prevalence of obesity in France is estimated to have increased from 14.5% to 15.0% during the period 2009-12 whereas obesity increased from 12.4% to 14.5% during the period 2006-2009. Assuming that the growth of the prevalence of obesity in the EU corresponds to the average arithmetic growth per year in the three LiveWell pilot countries, the proportion of obese people in the EU population in 2020 would be lower, at 18.5%. These two estimates of the expected prevalence of obesity in the EU in 2020 in the reference scenario (18.5% and 20.5%) are considered in the calculations of the cost of obesity and related diseases at the EU level.

²¹ European Union budget, available online at http://europa.eu/pol/financ/index_en.htm [last accessed October 2014].

Under the LiveWell 30% scenario, the research found that the prevalence of obesity in 2020 is expected to decrease by between 3.6% (low estimate) and 6.7% (high estimate) at EU level. Under the 70% scenario, it's expected to decrease by between 8.4% (low estimate) and 15.7% (high estimate). As cost reductions are assumed to be proportional to reductions in the prevalence of obesity, a switch to healthier and more sustainable diets by EU consumers could lead to an identical proportional reduction of the costs of obesity and related diseases in 2020.

To date, few health organisations have embraced the issue of sustainable healthy diets. Most importantly from LiveWell for LIFE's perspective, the remits of national health ministries and DG Health and Consumers (DG Sanco) currently don't cover sustainable diets. As a result, references to the environmental impacts of our diets in nutritional programmes and joint initiatives covering both health and sustainability are few and far between. LiveWell for LIFE wants to see greater cooperation between relevant policy bodies to support objectives around sustainable food consumption.



CHAPTER 2.3: GOOD FOR CULTURAL DIVERSITY

The EU benefits from an incredibly diverse cuisine and food culture in which its citizens take great pride. Food culture is so popular that in March 2014, the European Parliament adopted a report, *European gastronomic heritage: cultural and educational aspects*²², which welcomed ways to promote Europe's gastronomic heritage. These include local and regional food fairs and festivals as well as the three EU schemes for geographical and traditional specialities, known as Protected Designation of Origin (PDO), Protected Geographical Indication (PGI), and Traditional Specialities Guaranteed (TSG). Those schemes – which rarely include environmental requirements – exist alongside a number of voluntary initiatives. They are very popular – a 2010 EC inventory counted 441 schemes for agricultural products and foodstuffs marketed in the EU!²³

France is a notable example. In 2010, UNESCO declared that the gastronomic meal of the French was World Intangible Heritage²⁴, noting that: “The gastronomic meal emphasises togetherness, the pleasure of taste, and the balance between human beings and the products of nature”. The Mediterranean diet was also included in UNESCO's List of the Intangible Cultural Heritage of Humanity²⁵ – an initiative that was highly supported by the Spanish national and regional governments. Meanwhile in Sweden, the government has a vision of becoming a culinary nation in Europe. The 2010 programme, Matlandet Sverige²⁶, aims to stimulate food production, consumption and exports in order to establish Sweden as a leading food country.

The LiveWell project identified early on that it's crucial to ensure sustainable and healthy diets were culturally appropriate if they were going to be taken up. Early research carried out by WWF-UK showed that low-carbon diets could achieve a 70% reduction in greenhouse gas emissions. But as these diets would be so far removed from what people are used to eating and subsequently adopted by few, they would deliver little result in the fight against climate change.

This is the reason why LiveWell for LIFE wanted to create a model which lowered carbon emissions to the highest possible extent while remaining culturally acceptable and minimising change from the current diets. To this end, we created upper and lower bounds, based on factors including the popularity of foodstuffs (not excluding the most popular items), portion sizes (avoiding small amounts of items which can only be bought as units), cultural preferences (potatoes versus pasta versus rice as a source of carbohydrate), avoiding introducing large amounts of currently unpopular foods, and ensuring variety²⁷.

Invaluable feedback provided by the Network of European Food Stakeholders ensured that the LiveWell Plates for France, Spain and Sweden successfully showed that healthy low-carbon diets can meet existing cultural preferences. The LiveWell Plates were developed with national acceptability in mind, as the cuisine of the three pilot countries is quite different – so more potatoes in Sweden and more cereal or legumes in Spain – but this is more a matter of preference than a critical difference in the diet and its sustainability or nutritional content.



View Didier Peshard, President of Euro-Toques speak at the European Parliament.

²² European Parliament Legislative Observatory, *European gastronomic heritage: cultural and educational aspects* Available online at [http://www.europarl.europa.eu/oeil/popups/ficheprocedure.do?lang=en&reference=2013/2181\(INI\)#keyEvents](http://www.europarl.europa.eu/oeil/popups/ficheprocedure.do?lang=en&reference=2013/2181(INI)#keyEvents) [last accessed October 2014].

²³ European Commission Agriculture and Rural Development, *Food Quality Certification Schemes*.

Available online at http://ec.europa.eu/agriculture/quality/certification/index_en.htm [last accessed October 2014].

²⁴ UNESCO, *Intangible heritage - Gastronomic Meal of the French*. Available online at <http://www.unesco.org/culture/ich/index.php?RL=00437> [last accessed October 2014].

²⁵ UNESCO, *Intangible heritage - Mediterranean diet*. Available online at <http://www.unesco.org/culture/ich/RL/00884> [last accessed October 2014].

²⁶ Regeringskansliet, *Sweden - the culinary nation*. Available online at <http://www.regeringen.se/content/1/c6/10/93/16/3e24ad40.pdf> [last accessed October 2014].

²⁷ For more information, please refer to LiveWell for LIFE's 'A balance of healthy and sustainable choices' report.

Available online at <http://livewellforlife.eu/wp-content/uploads/2013/02/A-balance-of-healthy-and-sustainable-food-choices.pdf>

CHAPTER 2.4: GOOD FOR THE WALLET

Socio-economic barriers and opportunities were discussed at length during the second LiveWell for LIFE stakeholder workshop – *Adopting healthy sustainable diets: key opportunities and barriers* – which took place in Brussels in March 2013. One of the key barriers was the perception by consumers that sustainable healthy diets are more expensive than conventional diets²⁸. This is backed up by research that shows that price (91%) is the second most important consideration after quality (96%) for European consumers when shopping for food²⁹ and this is likely to bite particularly hard during the financial downturns being experienced in many European countries.

Socio-economic status is also an important factor in sustainable food choices. Consumers who struggle to pay bills tend to purchase higher-calorie foods, which are seen as a better bargain³⁰.

According to the UK Office for National Statistics, food prices have risen by 12.6% above inflation over the past six years, while incomes have stalled. A survey carried out by Which? in June 2013 showed eight in 10 UK shoppers (78%) were concerned about the increasing cost of food³¹.

The good news is that our research shows that a healthy sustainable diet doesn't necessarily cost more³². Developing the LiveWell Plates showed that the LiveWell diet would reduce greenhouse gas emissions from the current average by 25% and decrease an average person's daily expenditure on food from €4.90 to €4.36 in France. The costs for the LiveWell Plate were similar with the costs of the average current diet in Spain³³ and Sweden. This is because the proportion of vegetal proteins (e.g. legumes) increases under the LiveWell diet and that their cost is less than that of meat.

The Barilla Centre³⁴ highlights the importance of educating people so that they can understand that it is possible to eat in a healthy way without spending a lot of money. Substituting animal proteins with grains, vegetables and legumes makes a diet less expensive.³⁵ Indeed, it was recommended at the second LiveWell stakeholder workshop to make the potential cost savings of sustainable diets an important message as cost is seen by many as a barrier.

European citizens expect to have nutritious and affordable food, and promoting sustainable healthy diets to them is key. There are examples of initiatives spearheaded by consumers, businesses and policy-makers in Europe. These are explored in chapter 4.



²⁸ LiveWell for LIFE, Adopting healthy, sustainable diets: key opportunities and barriers. Available online at <http://livewellforlife.eu/wp-content/uploads/2013/05/Adopting-healthy-sustainable-diets-report.pdf> [last accessed October 2014].

²⁹ Special Eurobarometer 389, Europeans' attitudes towards food security, food quality and the countryside. Available online at http://ec.europa.eu/agriculture/survey/2012/389_en.pdf [last accessed October 2014].

³⁰ Faber, J et al. 2012. Behavioural Climate Change Mitigation Options. CE Delft, Delft, Netherlands. Available online at http://ec.europa.eu/clima/policies/roadmap/docs/food_report_en.pdf [last accessed October 2014].

³¹ Which? Survey. Available online at <http://www.which.co.uk/news/2013/09/rising-food-prices-are-hard-to-digest-334082/>

³² Macdiarmid, J et al. 2011. LiveWell: a balance of healthy and sustainable food choices. WWF-UK, available online at http://assets.wwf.org.uk/downloads/livewell_report_jan11.pdf [last accessed October 2014].

³³ This figure related to the original Spanish Plate.

³⁴ Barilla Centre for Food & Nutrition. 2012. Eating in 2030: Trends and Perspectives. Barilla Centre for Food and Nutrition, Parma, Italy. Available online at http://www.barillacfn.com/wp-content/uploads/2012/11/alimentazione_2030_eng.pdf [last accessed October 2014].

³⁵ Faber, J et al. 2012. Behavioural Climate Change Mitigation Options. CE Delft, Delft, Netherlands. http://ec.europa.eu/clima/policies/roadmap/docs/food_report_en.pdf

CHAPTER 3: EATING OUR WAY TO A SUSTAINABLE FOOD SYSTEM



CHAPTER 3: EATING OUR WAY TO A SUSTAINABLE FOOD SYSTEM

CHAPTER 3.1: THE GROWING TREND OF SUSTAINABLE FOOD AND DIETS

Sustainable diets and food consumption were once niche topics, but now they're attracting interest from more mainstream stakeholders. Talking to and engaging with actors of the EU food chain as part of the LiveWell project has increased its understanding of sustainable healthy diets, and WWF-UK's Value Your Food conference³⁶, held in March 2014 saw speakers from Tesco and Nestlé talking about their interest in sustainable nutrition.

In the UK, the Eating Better alliance was launched in July 2013. It aims to help people eat less meat and healthier, more sustainable food. It's now supported by no fewer than 34 organisations³⁷ with health, environment, resource use, social justice, animal welfare, consumer, international development and faith perspectives.

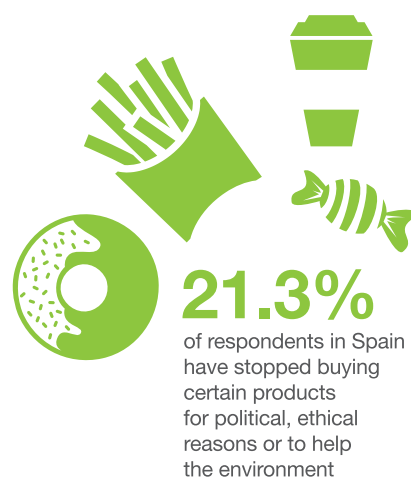
In Spain, according to a National Barometer published in May this year, 21.3% of respondents have stopped buying certain products for political, ethical reasons or to help the environment³⁸.

There's also growing support for the movement from individual businesses and the European business community as a whole:

- The Stakeholder Dialogue Group on Food Sustainability is a voluntary group set up in 2013 and formed from 18 organisations and companies from across the EU food chain. Members include the Liaison Centre for the Meat Processing Industry in the European Union (CLITRAVI), European Farmers – European Agri-Cooperatives (COPA-COGECA), Nestlé and FoodDrinkEurope. In April 2014, it published the Joint Declaration *Actions towards a more sustainable European food chain*³⁹, which encourages EU policy makers to work together to safeguard the sustainability of food systems for future generations. Some of the 32 concrete policy recommendations it lists could help achieve a more sustainable food chain by 2020.

These include:

- Helping consumers make sustainable and healthy lifestyle choices.
- Promoting healthy diets and lifestyles.
- Encouraging more environmentally-sustainable food consumption patterns.



³⁶ Please see <http://livewellforlife.eu/value-your-food-conference> [last accessed October 2014].

³⁷ Eating better website <http://www.eating-better.org/about/local-and-community-supporters.html> [last accessed October 2014].

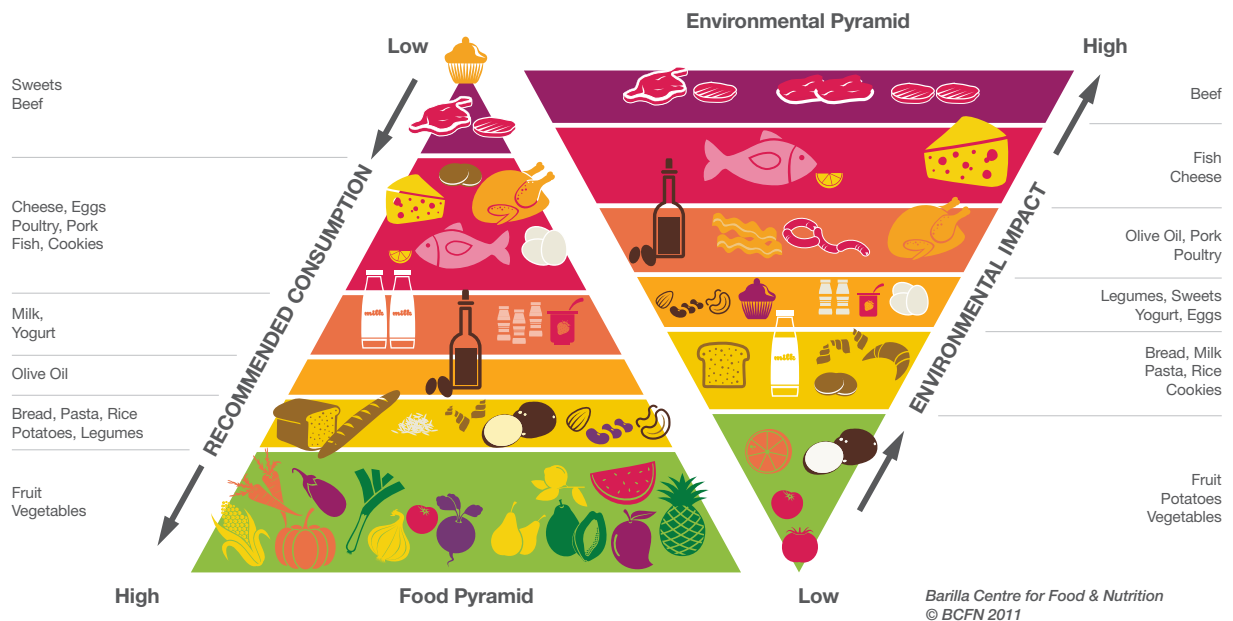
³⁸ Centro de Investigaciones sociológicas http://datos.cis.es/pdf/Es3024mar_A.pdf [last accessed October 2014].

³⁹ Stakeholder Dialogue Group on Food Sustainability, Actions towards a more sustainable European Food chain. Available online at http://www.fooddrinkEurope.eu/uploads/press-releases_documents/Declaration_Sustainability_of_Food_System.pdf [Last accessed October 2014].

⁴⁰ Barilla Center for Food and Nutrition, Double Pyramid 2012: enabling sustainable food choices. Available online <http://www.barillacfn.com/en/position-paper/buono-per-te-sostenibile-per-pianeta-modello-doppia-piramide/> [Last accessed October 2014].

CHAPTER 3.1: THE GROWING TREND OF SUSTAINABLE FOOD AND DIETS

Double Food – Environment Pyramid Model



WWF's European Policy Office was the only environmental non-governmental organisation (NGO) involved in the Stakeholder Dialogue Group on Food Sustainability. It worked hard to ensure these issues were addressed in the statement.

- A fervent corporate advocate for sustainable diets, Barilla – through its Barilla Center for Food & Nutrition (BCFN) – works to “prioritise the urgent issues regarding food and nutrition in the agendas of opinion leaders and decision makers across the world”. One of its tools is the food and environmental Double Food – Environment Pyramid model, used to help the adoption of behaviours and food choices which are healthy and environmentally sustainable⁴⁰. The pyramid was created by studying and measuring the impact of foods already in traditional food pyramids on the environment. They are then put in an inverted pyramid, where foods placed at the lowest level (at the peak of the triangle) have the lowest environmental impact. By looking at the two pyramids next to each other, people can see that the foods they are advised to eat more of, are also generally those with the lowest environmental impacts.
- This year IKEA announced that it would start providing lower carbon alternatives – chicken and vegetarian – alongside its regular beef and pork meatballs in 2015. IKEA Food serves over 600 million customers in more than 350 IKEA stores in 46 countries⁴¹. It says this shift towards low-carbon options is part of IKEA's commitment to create a food supply chain that's sustainable⁴².
- Together with the Stockholm Resilience Centre, the Norwegian Stordalen Foundation has started an annual high-level forum – the EAT Stockholm Food Forum – to tackle the challenge of linking the issues of food systems, health and sustainability. The inaugural EAT forum took place in Stockholm in May 2014 and gathered around 500 global representatives from academia, business, NGOs, UN organisations and the philanthropic community – the aim is to continue to collaborate, communicate and research towards sustainable, healthy diets.

⁴¹ IKEA website: http://www.ikea.com/ms/en_GB/about-the-ikea-group/people-and-planet/energy-and-resources/ [Last accessed October 2014].

⁴² Ikea corporate news, IKEA meatballs and sustainability http://www.ikea.com/us/en/about_ikea/newsitem/042214-meatballs-sustainability [Last accessed October 2014].

CHAPTER 3.2: BETTER DIETS

– A MEMBER STATE RESPONSIBILITY WITH EU SUPPORT

Within the EU, Member State governments are responsible for giving information about adequate nutrition. Each European country has national Food-Based Dietary Guidelines (FBDG) which give guidance of what constitutes a healthy diet in that country and usually a range of policy tools to support their adoption. Each of the three countries in the LiveWell project has a dedicated national policy to encourage healthier nutrition patterns. Yet starting points, ambition levels, available resources and implementation seem to differ between them. We looked at the diets of France, Spain and Sweden and found that all three countries are moving towards what we call a Western diet – one high in salt, fat and sugar⁴³.

EU cooperation to combat obesity is a relatively new phenomenon. In 2007, the EC presented a proposal – *A Strategy for Europe on Nutrition, Overweight and Obesity related health issues* – which was the first comprehensive EU strategy to support action taken at local, regional, national and European levels to reduce the risks associated with poor nutrition and limited physical exercise. It also sought to address inequalities across member states⁴⁴. The strategy includes ways to make EU policies work better, encourages innovative partnerships, sets out challenges to key stakeholders and outlines plans for better monitoring and reporting.

EU legislation to help the strategy get under way has been largely limited to supplying better information, such as 2006's Nutrition and Health Claims Regulation and the Food Information Regulation, adopted in 2011. The latter makes labelling for energy and six key nutrients mandatory, sets rules for legibility and allows for extra ways of representation – such as colour-coded systems – on a voluntary basis, as long as certain criteria are met.

The European Food Safety Agency (EFSA) developed common EU dietary reference values, giving a catch-all standard for daily recommended intake for key nutrients such as fats and protein⁴⁵. The implementation of the strategy is partly paid for through EU funding programmes including the EU School Fruit Scheme⁴⁶.

European cooperation to encourage eating more environmentally sustainable food is also fairly new. The EU's seventh Environmental Action Programme, an agreement between EU member states, Commission and Parliament on the EU's environmental priorities until 2020, states: “structural changes in production, technology and innovation, as well as consumption patterns and lifestyles have reduced the overall environmental impact of production and consumption, in particular in the food, housing and mobility sectors.” European policy efforts have so far mostly encouraged the consumption of products with higher environmental production standards, in particular through the EU organic regulation and providing guidance on green public procurement of food. More recently, the Commission also questioned the environmental sustainability of diets as a whole, in particular the share of animal protein⁴⁷.

Developing a harmonised methodology to measure the environmental footprint of products (PEF) is also crucial. Currently this is being piloted for a large range of food product groups, and should give important information on which minimum sustainability standards can be agreed. It's critical to green the EU's single market for food products, but this would do little to address the existing unsustainable balance in diets. For this to happen, the policy communities working on healthy and sustainable food consumption need to do so better together. As the next section shows, some European governments have already stepped up to this challenge.



⁴³ Van Dooren, C. & Kramer, G. 2012. *Food patterns and dietary recommendations in Spain, France and Sweden*. Voedingcentrum & Blonk Milieu Advies for LiveWell for LIFE / http://livewellforlife.eu/wp-content/uploads/2012/04/LW_A4-Food-Rept_Update_final.pdf

⁴⁴ European Commission, 2014. *Strategy on nutrition, overweight and obesity-related health issues*.

Available at http://ec.europa.eu/health/nutrition_physical_activity/policy/strategy_en.htm [Accessed 10 October 2014].

⁴⁵ EFSA, 2014. *Dietary reference values and dietary guidelines*. Available at <http://www.efsa.europa.eu/en/topics/topic/drv.htm> [Accessed 10 October 2014].

⁴⁶ European Commission, 2014. *Implementation progress report of the Strategy for Europe on nutrition, overweight and obesity related health issues*. Available at http://ec.europa.eu/health/nutrition_physical_activity/policy/implementation_report_en.htm [Accessed 10 October 2014].

⁴⁷ European Commission, 2011. COM/2011/0571 final. *Roadmap to a Resource Efficient Europe*. / <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52011DC0571>

CHAPTER 3.3: GOVERNMENT ACTION ON THE INTERFACE OF HEALTHY AND SUSTAINABLE DIETS

Some EU member states recognise the need for integrated guidance on healthy and sustainable nutrition, and are developing recommendations to inform policy-makers, business and consumers. There are big differences between the LiveWell for LIFE pilot countries.

In spite of excellent cooperation between WWF and Spanish health organisations to develop the LiveWell Plates, the financial and economic crisis has meant that this kind of cooperation isn't established at government level. The Spanish government is struggling to maintain existing standards in healthcare, including public support for healthy nutrition. Expanding the existing policy framework by introducing environmental standards is low on the priority list.

France has one of the most developed policies to ensure healthy diets. The Manger Bouger campaign and the broader National Health and Nutrition Programme (PNNS) are regarded as best-practice in Europe. Moreover, French government-financed research contributes a great deal to the global knowledge base on sustainable food systems⁴⁸. Research by the French National Institute of Agronomic Research (INRA) provided important empirical evidence that healthier diets, despite the obvious co-benefits, wouldn't necessarily mean less environmentally-friendly diets⁴⁹. The French government also works hard on sustainable food consumption, finding better ways to tell people about the environmental footprint of products including food⁵⁰.

Nonetheless, despite a recent increase in cooperation between the agriculture, sustainable development and public health policy communities, integrated approaches to healthy and sustainable diets are still to be developed. The Programme National Alimentation (PNA) has tried to combine health, environmental footprint and agricultural concerns without much success – until now, with a revised programme including more sustainability issues. But health issues are set to stay separate, which is unlikely to improve cooperation between the ministries.



⁴⁸ See for example INRA & CIRAD, 2011. *DuALine - Durabilité de l'alimentation face à de nouveaux enjeux* <http://www.cirad.fr/en/publications-resources/publishing/studies-and-documents/dualine>

⁴⁹ Vieux et al, 2013. High nutritional quality is not associated with low greenhouse gas emissions in self-selected diets of French adults. *The American Journal of Clinical Nutrition*. March 2013, 97, pp 569-583 / <http://ajcn.nutrition.org/content/early/2013/01/30/ajcn.112.035105.abstract?sid=2aad825c-7b40-4a92-a198-2a6483ce1032>

⁵⁰ Ministère de l'Ecologie, du Développement durable et de l'Energie, 2014. *Display of the environmental footprint of products: French developments* Available at <http://www.developpement-durable.gouv.fr/Product-Environmental-Footprint.html> [Accessed 10 October 2014].

⁵¹ Foresight, 2011. *The Future of Food and Farming* Final Project Report. The Government Office for Science, London. / <https://www.gov.uk/government/publications/future-of-food-and-farming>

⁵² Department for Environment, Food & Rural Affairs, 2013. *Sustainable consumption report: Follow-up to the Green Food Project* / <https://www.gov.uk/government/publications/sustainable-consumption-report-follow-up-to-the-green-food-project>



Best-practice experiences in the development of integrated guidance on healthy and sustainable diets

UK

Inspired by the conclusions of the Foresight study *The Future of Food and Farming*⁵¹, the UK government included a commitment in its 2011 Natural Environment White Paper to “bring together government, industry and environmental partners to reconcile how we will achieve our goals of improving the environment and increasing food production”.

This manifested in the Green Food Project, which gathered stakeholders from across the board to discuss and agree on the building blocks for a UK strategy to reach the twin goals of productivity and environmental sustainability. The project concluded that it needed more follow-up work to make the debate broader and more sophisticated, and focus on diet and consumption in the sustainability of the whole food system.

In July 2013, the recommendations of this follow-up consultation gave concrete advice on sustainable diet, consumer behaviour and sustainable consumption and growth principles. This included a loud call for increased government leadership on sustainable food systems, for example on “issues relating to consumption (e.g. how trade-offs will be addressed), on the integration between consumption and production side approaches, and on official and impartial consumer facing advice and labels”.⁵² So far, the government has not responded to these recommendations. And despite high stakeholder willingness, the next steps are unclear.



Sweden



Best-practice experiences in the development of integrated guidance on healthy and sustainable diets

The Swedish National Food Agency (SLV), together with its Nordic counterparts, gives evidence-based dietary recommendations every eight years⁵³. The latest, in 2014, includes a chapter on environmental aspects on food consumption for the first time. SLV is currently updating existing Swedish dietary recommendations – including environmental aspects – for early 2015.

In June 2014, SLV also launched its first recommendation on the amount of meat in diets, based on health issues with considerations for the environment. In line with the World Cancer Research Fund, it states that Swedes should eat no more than 500g of red meat per week, including processed meat products such as sausage⁵⁴.

This work hasn't been without hurdles. In 2008, the SLV published a report, *Towards Environmentally Sound Dietary Guidelines*, to help adjust the Swedish food based dietary guidelines based on environmental priorities⁵⁵. The report was developed closely with the Swedish Environment Protection Agency (SEPA) for whom more sustainable food consumption is crucial to achieving at least four of its 16 core objectives for 2020: reduced climate impact; a non-toxic environment; a varied agricultural landscape; and a rich diversity of plant and animal life.

As the report had EU relevance, it was sent to the EC for notification in 2009, but the Commission sent negative feedback to the Swedish government as it included various recommendations to increase the consumption of Swedish food products such as fruits, root vegetables, animal products and oils. Even though the Swedish government had good environmental arguments for these recommendations, they were thought to conflict with the EU's Single Market Act and would unfairly favour Swedish farmers. These conflicting objectives caused a serious delay in the Swedish policy developments. To avoid similar delays in other countries wanting to update their dietary guidelines, we advise the EC to give better proactive guidance in future.

⁵³ Nordic Council of Ministers, 2014. *Nordic Nutrition Recommendations 2012: Integrating nutrition and physical activity*. Copenhagen: Nordisk ministerråd <http://www.norden.org/en/theme/nordic-nutrition-recommendation>

⁵⁴ Darnerud, P. & Ilbäck, N., 2014. *Colorectal cancer-incidence in relation to consumption of red and processed meat*. Uppsala, National Food Agency Sweden (SLV) / http://www.slv.se/upload/dokument/rapporter/2014_livsmedelsverket_3_cancer_red_processed_meat.pdf

⁵⁵ Swedish National Food Agency, 2008. *Towards Environmentally Sound Dietary Guidelines - Scientific Basis for Environmental Assessment of the Swedish National Food Agency's Dietary Guidelines* / <http://www.slv.se/en-gb/Group1/Food-and-environment/Eco-smart-food-choices/>



Netherlands



*Best-practice
experiences in the
development of
integrated guidance
on healthy and
sustainable diets*

Although it's not a LiveWell pilot country, it's worth mentioning progress in the Netherlands on integrated government advice on healthy and sustainable diets. In 2009, the Dutch Health Council⁵⁶ assessed the ecological consequences of the country's healthy diet recommendations⁵⁷. It found that a healthy diet has much in common with an ecologically-responsible diet, and that by far the greatest combined health and ecological benefits are obtained by moving to a less animal-based, more plant-based diet. The Dutch recommendation to eat fish twice a week was considered as the only health recommendation with a significant negative environmental impact in the light of current fish stocks.

Currently the Dutch Nutrition Centre, as part of a planned revision of the Dutch dietary guidelines, is preparing integrated health and environmental guidelines. These will be presented in mid-2015.

Another recommendation was that priority should be given to analyses and measures at the European and global level, because Dutch food production is strongly internationally-oriented and measures at this level can have the greatest effect. The Council recommended that broad European support be sought in the development of guidelines for a healthy and eco-friendly diet. This also means that Dutch efforts are needed not just at the national, but also and particularly at the European level to expand the supply of ecologically responsible foods. In 2011, the Dutch Environment Assessment Agency responded to this call with the publication of the *Protein Puzzle report*, showing the health and ecological effects of current EU consumption of meat, fish and eggs⁵⁸.

⁵⁶ The Health Council is an independent scientific advisory body. It is our task to provide the government and parliament with advice in the field of public health and health/healthcare research.

⁵⁷ Health Council of the Netherlands, 2011. *Guidelines for a healthy diet: the ecological perspective*. The Hague: Health Council of the Netherlands, publication no. 2011/08E. ISBN 978-90-5549-845-1 / <http://www.gezondheidsraad.nl/en/publications/healthy-nutrition/guidelines-healthy-diet-ecological-perspective>

⁵⁸ Westhoek et al, 2011. *The protein puzzle. The consumption and production of meat, dairy and fish in the European Union*. / The Hague: Dutch Environmental Assessment Agency (PBL).

**CHAPTER 4:
BARRIERS AND
OPPORTUNITIES FOR
SUSTAINABLE DIETS
– WHAT CAN
GOVERNMENTS DO?**



CHAPTER 4: BARRIERS AND OPPORTUNITIES FOR SUSTAINABLE DIETS – WHAT CAN GOVERNMENTS DO?

An important part of the LiveWell for LIFE project was to pinpoint the main social and economic barriers and opportunities for the adoption of more healthy and sustainable diets in Europe. The second LiveWell workshop discussed a long list of key barriers and opportunities for the people, businesses and policy makers who make up what we call the triangle of change. Table 1 shows an overview of the workshop, which advised on the most urgent challenges in line with the LiveWell Plate's recommendations.

	Opportunities	Barriers
People	Growing interest in sustainable food	Limited knowledge/confusion
	Models of sustainable diets already exist	Habits
	Interest in health	Perceived costs
	Saving money	Cultural/gender issues
		Time/lifestyle
		Access
Policy makers	Policy wins (including public health, climate change, food security and environmental goals)	Focus on food production not consumption
	Empowering food stakeholders to support policy	Economic climate
		Institutional culture
		Reluctance to get involved with behaviour change policies
		Government sensitivity to industry pressure
Business	Meeting societal expectations	Influencing consumers
	European policy	Supply-side challenges
	Consumer choices	Policy framework challenge
		Lack of an authoritative definition of a sustainable diet

Table 1



CHAPTER 4.1: KEY BARRIERS FOR SUSTAINABLE DIETS

One clear opportunity is timing. The LiveWell stakeholders think the time is right for change, citing a rapidly growing consumer interest in better food for a variety of reasons – in particular, health.

Even though environmental concerns about food are growing, health is still a stronger motivator for sustained behaviour change. UK government research into attitudes and behaviour around sustainable food found that health is the most important factor for consumers (81%), while environmental sustainability was the least important (26%)⁵⁹. A study of consumers across EU member states also showed that health was more important than environmental concerns when choosing food. Even though 32% of people said they would like to buy meat or meat products less often, it was mostly for health reasons (54%), rather than environmental concern (16%). Many proactive businesses have moved into the growing market niche for healthy and sustainable food.

But it's not just health – a broader pattern can be seen where changing food patterns are an identity issue. Take the recent popularity of the Slow and Local Food movements. Recent research suggests that two key value systems primarily change to less and better meat consumption: the 'organic' and 'gourmet' food movements. People signing up for gourmet food value the intense taste and aesthetics of food and the social relationships it brings to society. Food needs to be tasty, adventurous and culturally rooted. Organic⁶⁰ food is characterised by an ethical perspective, and the physical and moral purity of food is highly valued. Food needs to be pure, fair trade and with a minimal environmental footprint⁶¹. These changing value systems around food, be they for social, economic or environmental reasons, indicate a business opportunity to meet the growing appetite for more sustainable food.

⁵⁹ Department for Environment, Food & Rural Affairs. 2011. Attitudes and Behaviours around Sustainable Food Purchasing. Defra, London, UK. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/100000/Attitudes_and_Behaviours_around_Sustainable_Food_Purchasing.pdf

⁶⁰ 'Organic' in this citation is meant a broad value system around food, not to be confused with the definition and principles of the organic agriculture movement.

⁶¹ Schössler & Hedlund-De Witt, 2012. Sustainable Protein Consumption and Cultural Innovation – What business, organisations, and governments can learn from sustainable food trends in Europe and the United States. Amsterdam, March 2012, ISBN: 978-94-6190-884-1 / http://www.ivm.vu.nl/en/Images/Sustainable%20protein%20consumption%20and%20cultural%20innovation_tcm53-263438.pdf

CHAPTER 4.2: KEY BARRIERS FOR SUSTAINABLE DIETS

Despite consumers' increasing knowledge about healthy diets, the LiveWell Network of European Food Stakeholder stressed that there's still widespread misunderstanding about environmentally-friendly diets across Europe. Many people simply don't realise that food makes up a significant share of their personal ecological footprint. And recent research suggests that healthier diets don't always lead to a lower carbon footprint⁶². There are also large discrepancies among consumers' understanding of what constitutes a sustainable diet. For example, consumer research in the UK shows that people think that reduced food packaging is the most important aspect of environmentally-friendly food consumption, but lower meat consumption is seen to help the least⁶³. Despite signs of growing sustainable food literacy in the EU⁶⁴, the LiveWell project showed that education and increasing awareness are still big challenges.

Another barrier is how information on food sustainability is currently given. People who want to be better informed usually find a cacophony of messages, some of which are incomplete, confusing or even conflicting. Consumer confidence in green claims by industry is low, and many don't recognise food quality assurance logos. Just over a third of EU citizens are aware of the Fairtrade logo, a quarter are aware of the EU's Organic logo and only a small minority are aware of logos symbolising the three elements of the EU's Protected Geographical Status scheme. Knowledge of these logos varies widely between EU member states⁶⁵. We need to streamline and improve communication on green claims.

Besides being poorly-informed consumers are also creatures of habit – even those who want to make changes to their diets. Our stakeholders see those ingrained habits as a major barrier. A gap remains between those informed and motivated consumers and their actions – the so-called knowing-doing gap. Consumers who claim to want to think about ethical and environmental issues when choosing food still put this as a relatively low priority compared to other issues such as price, safety, taste, quality and healthy eating^{66 67}. LiveWell stakeholders stressed that food price was a particularly important barrier. Currently, the price of food doesn't reflect its real costs. Some foods have high nutritional and environmental impacts which should be reflected in their price. On a more positive note, the fact that the LiveWell Plates showed that sustainable diets can actually save money, price might be one of the key opportunities for their adoption.



⁶² See for example: Vieux et al, 2013. High nutritional quality is not associated with low greenhouse gas emissions in self-selected diets of French adults. *The American Journal of Clinical Nutrition*. March 2013, 97 (3) pp 569-583

⁶³ Faber, J et al. 2012. Behavioural Climate Change Mitigation Options. CE Delft, Delft, Netherlands. http://ec.europa.eu/clima/policies/roadmap/docs/food_report_en.pdf.

⁶⁴ European Commission, 2013. *Flash Eurobarometer 367: Attitudes of Europeans towards building the single market for green products*. On pp 98, the report states that 80% of Europeans indicate they are willing to eat less but better meat for environmental reasons / http://ec.europa.eu/public_opinion/archives/flash_arch_374_361_en.htm#367

⁶⁵ European Commission. 2012. Europeans' Attitudes Towards Food Security, Food Quality and the Countryside. Special Eurobarometer 389. European Commission, Brussels, Belgium. http://ec.europa.eu/public_opinion/archives/ebs/ebs_389_en.pdf

⁶⁶ Which? 2010. *Making Sustainable Food Choices Easier*. Which?, London, UK.

⁶⁷ Dutch Environment Assessment Agency (PBL), 2013. *De Macht van Het Menu* (Power of the Menu). Den Haag, 2013 / http://www.pbl.nl/sites/default/files/cms/publicaties/PBL_2013_De_macht_van_het_menu_792.pdf

CHAPTER 4.3: SUPPORTING POLICY TOOLS TO FILL THE GAPS

The LiveWell project's work on barriers and opportunities showed how much we need a renewed policy focus on consumption to achieve a sustainable European food system that includes healthy and balanced diets. Based on the second LiveWell stakeholders' workshop, there are six main lessons for policy-makers to prioritise.

1. Use the current public momentum for more sustainable food and diets.
2. Support higher food literacy, in particular on the environmental impact of food.
3. Work with policy-makers to bridge the knowing–doing gap. Make better use of behavioural science when designing policy and communication strategies.
4. Support businesses that already support sustainable food and diets.
5. Make sure the price of food reflects its real cost to society and the environment.
6. Communicate the cost-saving potential of healthy and sustainable diets next to the quality potential of individual products.

As outlined in Chapter 3, there are a wide range of local, national, regional and European policy initiatives to encourage better food consumption, but most are exclusively targeted at healthy nutrition. As sustainable diets are a new challenge for most of the EU, we explored the most important building blocks for a policy framework in which the six challenges above can be taken forward. These supportive policy options need to underpin more specific measures, three of which were prioritised by our stakeholder network and are presented in the next chapter.

As both malnutrition and dietary environmental footprint have a European dimension, and because most food and agricultural policies are devised at a European level, these recommendations are primarily directed at EU decision-makers. Four overarching priorities stand out.

1. Development of a more coherent and integrated policy framework.
2. Target setting and data reporting.
3. Sharing best practice.
4. Supporting common research priorities.



CHAPTER 4.3.1: DEVELOPING A MORE COHERENT AND INTEGRATED POLICY FRAMEWORK

In March 2014, a cross-party group of MEPs organised a sustainable food conference in the European parliament. They wanted the EU to develop a Common EU Sustainable Food Policy to link up various food policies on health, agriculture and environment⁶⁸. In April, a group of the most influential EU food chain stakeholders issued a declaration on sustainable food systems, asking the EU to improve the coherence among different food-related policy objectives and instruments among EU stakeholder platforms taking into account the three pillars of sustainability – starting from EU agriculture and fisheries, health and consumers to waste management and energy policies⁶⁹. We think this shows that the EU's current fragmented policy approach to food doesn't work.

Our research, through the LiveWell for LIFE project, found that encouraging a shift towards more sustainable food production and consumption in relation to food needs action on many fronts and involves policies that are the responsibility of many different parts of the government. Although some joining up of the broader Sustainable Consumption and Production (SCP) agenda has already taken place⁷⁰, we need to develop a more integrated approach with food. The EC could build on its 2013 public consultation on the Sustainability of the Food System⁷¹ to develop a more coherent policy framework and create a sustainable food strategy and action plan with clear and measureable objectives and targets. Alongside specific ones to measure sustainability progress in the food system, other, broader targets would also be relevant – such as those promoting reductions in overall resource use⁷² or no net loss of biodiversity⁷³.

⁶⁸ European Parliament, 2014. European Parliament's Sustainable Food Conference video . Available online at: <http://www.europarl.europa.eu/ep-live/en/other-events/video?event=20140402-0900-SPECIAL-UNKN> [Accessed: 13 October 2014]

⁶⁹ FoodDrinkEurope, 2014. *Europe's food chain partners publish joint declaration on the sustainability of food systems* Available at: <http://www.fooddrinkeurope.eu/S=0/news/position/europes-food-chain-partners-publish-joint-declaration-on-the-sustainability/>

⁷⁰ In particular through the EU's 2008 SCP action plan and 2011 Roadmap to a Resource Efficient Europe

⁷¹ European Commission, 2014. *Sustainable food*. [online] Available at: <http://ec.europa.eu/environment/eussd/food.htm> [Accessed: 13 October 2014]

⁷² European Commission, 2011. COM(2011) 571: *Roadmap to a Resource Efficient Europe*. Proposes a target of 20% reduction in the food chain's resource inputs by 2020. / http://ec.europa.eu/environment/resource_efficiency/about/roadmap/index_en.htm

⁷³ European Commission, 2011. COM/2011/0244 final: *Our life insurance, our natural capital: an EU biodiversity strategy to 2020. The EU Biodiversity Strategy's 3rd target states that By 2020, ... to bring about a measurable improvement(*) in the conservation status of species and habitats that depend on or are affected by agriculture and in the provision of ecosystem services as compared to the EU2010 Baseline, thus contributing to enhance sustainable management.*

CHAPTER 4.3.2: TARGETS AND DATA

To check that targets set for sustainable food consumption and production are working, it will be important to make sure that they are monitored and evaluated properly. Member states will need to supply baseline information to set against a suitable set of indicators. Reporting will be regular, and mechanisms for this, and the necessary data-crunching at EU level, will need to be put in place.

This wouldn't necessarily mean starting from scratch with new systems. We could gain insight already by aggregating and communicating trends on existing reporting in food, health and environment. Reporting on the structural economic and financial measures to encourage more sustainable food and consumption could be made a requirement through the European and National Semesters, the EU's annual cycle of economic policy guidance and surveillance.



CHAPTER 4.3.3: SHARING BEST PRACTICE

The EU could help member states share information about policy tools used to encourage sustainable food choices. It could also examine the strengths and weaknesses of different approaches as well as barriers to implementation and how to overcome them. Sharing EU knowledge and experiences, perhaps through a regular forum, could encourage more creative and innovative approaches and may help overcome resistance to some of the less used policy economic and fiscal tools.

The EC could help share best practice by guiding member states on the tools available and how they might be used, as well as creating an online hub including examples. While such tools already exist for Green Public Procurement and increasingly for food waste reduction, a specific resource for sustainable food consumption would be helpful.

One practical idea from the LiveWell Network of European Food Stakeholders is to share ways of developing integrated dietary guidelines on health and environmental sustainability. As pointed out earlier, good examples exist across Europe but they are not linked up. Moreover, as the Swedish case study has shown, we need Commission guidance on the relationship between sustainability and competitiveness. The EC could kill two birds with one stone by doing this while also clarifying the boundaries of competition law.





CHAPTER 4.3.4: SUPPORTING COMMON RESEARCH AND DEVELOPMENT PRIORITIES

There are many information gaps in sustainable diet development currently hampering policy progress. The EU should play an active role in helping to fill these gaps through its own services, such as the Joint Research Centre, data from Eurostat or through funding calls under Horizon 2020.

These are some of the areas needing attention.

- Finding criteria or principles to pinpoint what constitutes sustainable food. Significant efforts are being made with life cycle analysis, but it's still complex to apply to food. The EU must urgently find solutions that can be applied in the short to medium term.
- Investigating further sustainability aspects of diets, such as reforestation, water and nutrient management.
- Marrying information on the external health and environmental costs of food and including them within the overall price of a product.
- Working out what kind of data is needed to report progress against targets set for sustainable food production and consumption.
- Commissioning reviews and evaluations of existing policy options in member states to promote sustainable food choices.
- Funding and researching new technology to help consumers make more informed choices when shopping (for example, by better buy-in to the EU's digital agenda).
- Compiling and reviewing existing research on behavioural change and food to help develop future policies designed to overcome some of the current barriers of sustainable diets.

As these supporting tools and data are improved over time, they can help the further development of more robust measures at a European level and lead to more ambitious policy tools being put in place for the longer term.

**CHAPTER 5:
SPECIFIC POLICY
MEASURES IDENTIFIED
IN LIVEWELL FOR LIFE**





CHAPTER 5: SPECIFIC POLICY MEASURES IDENTIFIED IN LIVEWELL FOR LIFE

Stakeholders at LiveWell for LIFE's third workshop in Brussels in June 2014, titled *Facilitating the adoption of Sustainable Diets in the EU* were asked to pinpoint the EU policy options and national initiatives they thought could be implemented today in line with our recommendations and would be most successful in convincing people in Europe to eat a sustainable diet.

Three areas emerged with high success potential because of their possible high impact, political acceptability and cost-effectiveness. These were education, Green Public Procurement and the need for a Common Food and Agriculture Policy. We've already discussed a common and integrated food policy strategy, and now we look at education and public procurement.

CHAPTER 5.1: EDUCATION

The majority of members of the Network of European Food Stakeholders thought education was the most politically acceptable measure, with a high potential for replication and cost-effectiveness for long-term impact.

In the EU, Education for Sustainable Development (ESD) has played an important role in improving sustainability, and has been recognised as such in the European Cooperation in Education and Training ('ET 2020'⁷⁴) and the Europe 2020 Strategy for jobs and growth⁷⁵.

All 28 EU member states have school food policies in place, 15 with mandatory regulations and 15 giving voluntary guidance on school food⁷⁶. Research from the IEEP noted that making sure consumers understand basic food sustainability issues is important. Food information law already relies on consumer information – through labelling, advertising and marketing – for getting key messages to the consumer. One of these messages is sustainability. The strategy depends on the concept of the average consumer as being “well-informed, observant and circumspect”⁷⁷, but this legal definition is now widely known to be fiction.

⁷⁴ Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020'). Available online at [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009XG0528\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009XG0528(01)&from=EN) [last accessed October 2014].

⁷⁵ Council conclusions on education for sustainable development, 3046th EDUCATION, YOUTH, CULTURE and SPORT Council meeting, Brussels, 18 and 19 November 2010. Available online at http://consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/educ/117855.pdf [last accessed October 2014].

⁷⁶ Stefan Storcksdieck genannt Bonsmann, Therese Kardakis, Jan Wollgast, Michael Nelson, Sandra Caldeira; Mapping of National School Food Policies across the EU28 plus Norway and Switzerland, 2014. Available online at <https://ec.europa.eu/jrc/sites/default/files/lbna26651enn.pdf> [last accessed October 2014].

⁷⁷ Eur-Lex, Case C-210/96 – Gut Springenheide. Available online at <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:61996CJ0210> [last accessed October 2014].

CHAPTER 5.1: EDUCATION

Civic Consulting's cost-benefit analysis also noted: "Food, nutrition and environment education measures are key policy measures to encourage the adoption of healthy and sustainable diets, which should be incorporated within a national sustainable food education strategy. Education should primarily be targeted at pupils at primary school level, but also at secondary school level to a lesser extent, and should consist not only of lessons in classrooms, but also incorporate practical educational approaches, including visits to farms/food manufacturing plants and the use of school gardens, as well as complementary measures such as cooking classes, as the combination of measures increases overall effectiveness."

The report also notes: "Several stakeholders interviewed in the case study countries (France, Spain and Sweden) suggested that relevant education measures should primarily be targeted at pupils in primary schools as children are considered most receptive to food education⁷⁸. This view is confirmed by scientific research, which found that sensory preferences are constructed during the first years of life and are then difficult to change⁷⁹. In addition, by learning and adopting healthy habits at a young age, the chance that such habits will be sustained into adulthood is greatly increased⁸⁰. Moreover, stakeholders also emphasised that 'food, nutrition and the environment' education in schools may not only have direct benefits for children [...] but can also have positive, indirect effects on consumption patterns adopted by their parents."

During the third stakeholder workshop, three of the seven groups of members of the Network of European Food Stakeholders chose to devise pathways focusing on education and reached very similar conclusions about the need to engage health, agriculture and environment actors both at EU and national level. Here is a representation of the pathway devised by the group of French stakeholders:

Introducing food, nutrition and the environment into the school curriculum is a crucial step towards achieving the wide adoption of healthy and sustainable diets.

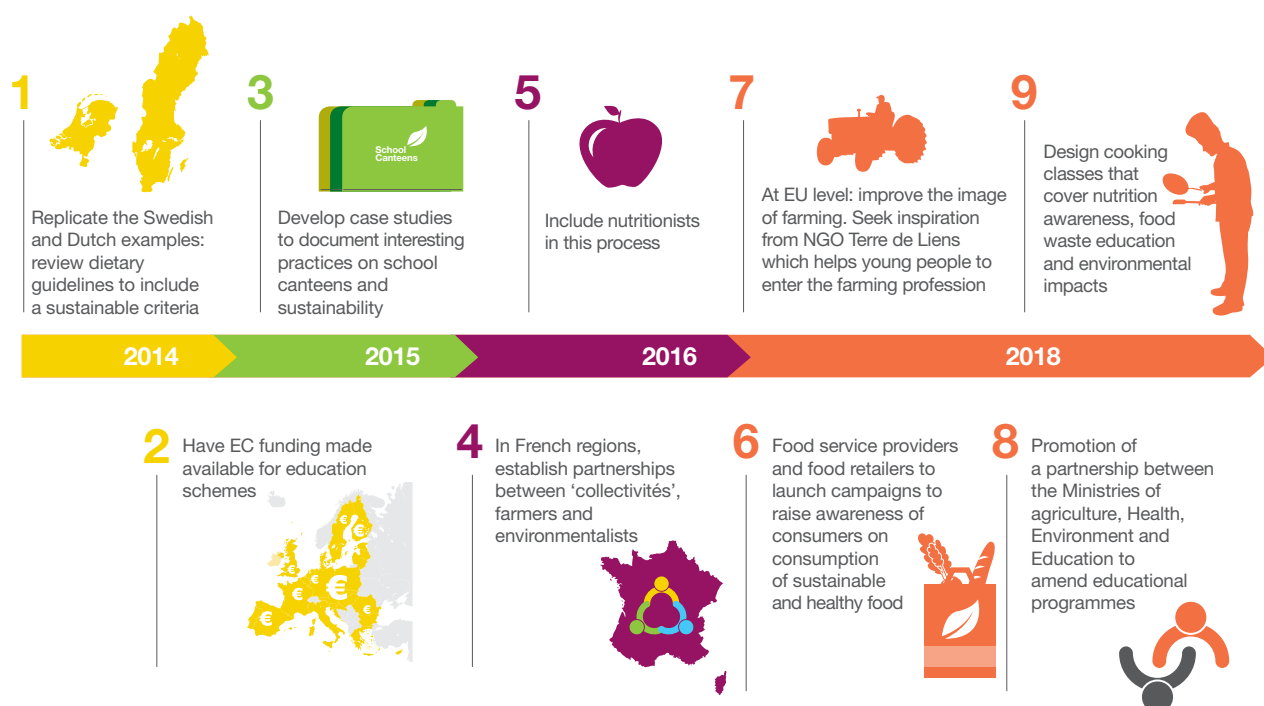


Figure 2: French pathway towards education to sustainable food consumption and production

⁷⁸ However, it was emphasized during the country interviews that education on sustainable and healthy diets could also be included in the curriculum of students in secondary schools. The French government indicates that it is essential to ensure that sustainable development concepts are spread throughout the curriculum regardless of the programme followed by students. French Government. 2013. La conférence environnementale, les 20 et 21 septembre 2013, Palais d'Iéna – Paris, Table ronde n°5, Éducation À l'environnement et au développement durable, Document de travail. Available online at http://www.developpement-durable.gouv.fr/IMG/pdf/Conf_envi_2013_Fiche_Table-Ronde_No5.pdf [last accessed October 2014]

⁷⁹ INRA, Les comportements alimentaires. Quels en sont les déterminants? Quelles actions, pour quels effets? 2010.

⁸⁰ European Commission, EU Action Plan on Childhood Obesity 2014-2020. Available online at http://ec.europa.eu/health/nutrition_physical_activity/docs/childhoodobesity_actionplan_2014_2020_en.pdf [last accessed October 2014]

CHAPTER 5.2: GREEN PUBLIC PROCUREMENT

A second popular choice was to strengthen the support for sustainable foods and diets in public procurement – often called Green Public Procurement. We think governments should live up to their own standards and supply their staff with a healthy, sustainable and balanced choice of foods.

In Europe, governments spend approximately €2 trillion annually on procurement, equivalent to some 17% of the EU's gross domestic product. Such a significant spending power can give strong incentives for markets to deliver more sustainable products and services. The basic concept of Green Public Procurement relies on having clear, justifiable, verifiable and ambitious environmental criteria for products, services and works, based on a life-cycle approach and scientific evidence base⁸¹.



Figure 3 – Benefits of Green Public Procurement⁸²

Many member states have decades of Green Public Procurement experience, but still several barriers identified across Europe limit its full potential. Firstly, in some food related areas, a lack of political support exists, with some public agencies not recognising the purpose of Green Public Procurement, in particular where it leads to increased costs. There is also a need for more guidance on how to verify green criteria and raise awareness of the benefits of greener products. Lastly, there is a need for legal guidance on how and where to integrate environmental criteria into the public procurement process while fully respecting European public procurement law⁸³.

⁸¹ European Commission, 2010. *Green Public Procurement*. European Union, 2010 / <http://ec.europa.eu/environment/gpp/pdf/brochure.pdf>

⁸³ European Commission, 2013. EU Green Public Procurement Policy [presentation, online] Available at: http://ec.europa.eu/environment/gpp/pdf/26_11_2013/Organising%20GPP%20internally%20DG%20ENV.pdf [Accessed 13 October 2014].

CHAPTER 5.2: GREEN PUBLIC PROCUREMENT

To overcome these barriers, in 2008 the EC published a Communication on Green Public Procurement which introduced four voluntary tools to facilitate Green Public Procurement.

- A political target: 50% of tendering procedures to be green by 2010.
- Common EU Green Public Procurement criteria for priority products/services.
- Legal/operational guidance in a Green Public Procurement training toolkit.
- Green Public Procurement national action plans.

There's a large diversity in the levels of ambition and implementation of the national action plans. Some member states still do not have a plan, and the share of green products and services ranges from 40-60% in the top four countries to less than 20% in 12 countries. Top performers are Belgium, Denmark, Netherlands, Sweden and the UK – countries that have a long tradition in Green Public Procurement and have set targets, hard or soft obligations, and developed institutionalised proactive capacity building efforts⁸⁴.

The Swedish Environmental Management Council, SEMCO, is the Swedish government's expert body on sustainable procurement. It has developed criteria for sustainable procurement of food categories such as meat, vegetables, grains and pulses, which are well known and widely used in Swedish municipalities. They also offer support to those municipalities and regions⁸⁵. From 2014, procurement criteria and support will be integrated in the Swedish Competition Authority. The criteria specify basic, middle-level and spearhead demands, and all criteria are compliant with the verification criterion, they must be able to verify.

Some examples of the power of Green Public Procurement

Ambitious targets are set out under Denmark's national Organic action plan for all public canteens to procure 60% of organic food by 2020⁸⁶.

2020

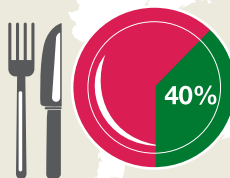


Since 1997, the City of Malmö, Sweden has dramatically increased its purchasing of organic food and by the end of 2012 about 40% of the food budget was spent on organic food; about nine million Euros is spent on organic food every year.⁸⁸

€9M

In Italy, organic food sourcing is prioritised in several regional school food programmes.

In 2010, about one million school dishes were cooked with organic foods, accounting for about 40% of school food consumption⁸⁷.



⁸⁴ European Commission, 2013. EU Green Public Procurement Policy [presentation, online] Available at: http://ec.europa.eu/environment/gpp/pdf/26_11_2013/Organising%20GPP%20internally%20DG%20ENV.pdf [Accessed 13 October 2014].

⁸⁵ Swedish Environmental Management Council (SEMCO), 2014. SEMCO Procurement Criteria – Food. [online] Available at: <http://www.msir.se/en/Home/Procurement/SEMCO-Procurement-criteria/Food/> [Accessed 13 October 2014].

The common EU Green Public Procurement criteria for food were published in 2008, and make a distinction between food and catering services. In the case of food, the only core criterion is the share of food produced in line with the EU's organic regulation, with extra points awarded based on the type and recyclability of packaging. For authorities who want to buy the best environmental products available on the market, the Commission introduced an additional comprehensive scheme for food. This adds the share of remaining products coming from Integrated Production sources as a core criterion. There are extra points awarded for reduced packaging, aquaculture and marine foods meeting a credible certified standard, and the share of animal products produced with high welfare standards according to national guidelines. The criteria for catering are similar, but add a core criterion on the share of products being in-season, and a comprehensive criterion on the sourcing of paper products⁸⁹.

These criteria should now be re-examined, based on today's major food sustainability challenges such as unsustainable diets and food waste. This should include looking at the quality of food products, nutritional aspects and minimising waste. We need a revision of the EC's public procurement guidelines on food, and in light of the large diversity in implementation between the EU member states and low progress overall; more effort should be put in the promotion of Green Public Procurement across the EU. This could be done through introducing a benchmarking system and an incentive scheme to reward effective Green Public Procurement. Making the Green Public Procurement criteria for food and catering services mandatory or setting an EU-wide target would also help⁹⁰. Adding a baseline through mandatory minimum criteria would also increase fairness in the EU's single market, where food producers and caterers now face a range of double standards.



⁸⁶ ARC2020, 2012. "Action plan" to improve organic production in Denmark. [online] Available at: <http://www.arc2020.eu/front/2012/06/%E2%80%9Daction-plan%E2%80%9D-to-improve-organic-production-in-denmark/> [Accessed: 13 October 2014]

⁸⁷ See Loes, A. et al., 2011. Innovative Public Organic food Procurement for Youth (iPOPY) - Final report. Tingvoll: Bioforsk Organic Food and Farming. Available at: https://djfextranet.agrsci.dk/sites/coreorganic_ipopy/public/Documents/iPOPY_final%20report.pdf

⁸⁸ European Commission, 2011. *Buying Green! A handbook on Green Public Procurement – 2nd edition*. Luxembourg: Publications Office of the European Union, 2011/ http://www.foodlinkscommunity.net/fileadmin/documents_organicresearch/foodlinks/publications/Foodlinks_report_low.pdf

⁸⁹ European Commission, 2008. *EU GPP Criteria*. [online] Available at: http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm [Accessed: 13 October 2014]

⁹⁰ BIO Intelligence Service, 2012. *Policies to encourage sustainable consumption*, Final report prepared for. European Commission (DG ENV) http://ec.europa.eu/environment/eussd/pdf/report_22082012.pdf

FINAL RECOMMENDATIONS

Great progress has been made, but there's still work to be done to improve public health, our environmental footprint and the resilience of our food systems further. Those at the forefront of change – civil society organisations, companies and academics – are facing systemic barriers which they can't overcome unless there's a change in the governing policy framework.

The urgency of the systemic and global challenges at hand, and the many values underlying food systems, suggest a new role for governments. Currently, most governments across Europe, including the EU, lack a coherent approach to food policy. And despite a wealth of evidence and stakeholder support, we're yet to see real action on food consumption and move beyond information measures to influence markets.

In this chapter we outline eight policy recommendations based on the LiveWell for LIFE project's experiences that would greatly support encouraging more healthy and sustainable diets:



- 1. Put in place no-regret policies:** in consultation with the LiveWell for LIFE Network of European Food Stakeholders, we identified three policy options thought to have high impact, be politically acceptable and cost-effective. As such, they should be rolled out, fast.



- a) Revise national dietary guidelines to reflect sustainability and greenhouse gas mitigation objectives:** we've shown that large overlaps exist between healthy and sustainable diets. But there can also be clear trade-offs: encouraging people to eat more fish can be detrimental to fish stocks, and replacing red meat with larger quantities of white meat doesn't benefit the climate. National governments should develop policies that provide more balanced, integrated dietary recommendations on healthy and sustainable diets. Such policies (a good example of which can be found in the Netherlands) could provide a helpful and reliable basis for future initiatives on sustainable food consumption.



- b) Strengthen Green Public Procurement:** the LiveWell Network of European Food Stakeholders recommended improving Green Public Procurement in food and catering and making it mandatory. Public money should be used to buy and serve healthy and sustainable food. Through its procurement, the European public sector is a powerful actor in the food chain and can create new markets and foster the development of an economy of quality. Many successful case studies exist in Europe – what is now needed is large-scale uptake. A thorough revision of the EU's Green Public Procurement guidelines should be prioritised, with the aim to ultimately set more binding minimum environmental standards for public procurement of food.



- c) Support food education:** members of the LiveWell Network of stakeholders have repeatedly noted the need to find ways to reconnect people with the origins of their food so they can make wiser consumption choices. Governments must support better food education. Activities such as food growing, farm visits and cooking classes should be made available in all schools and not be dependent on local initiatives or tuition fees. School food policies at national and EU levels should seek to provide children with healthy and sustainable lunches as well as put greater focus on education to encourage healthy eating habits, food diversity as well as environmental sustainability.



2. Upgrade agricultural and nutrition policies to one food policy that has sustainability at its core: values on environmental, economic and social issues should inform food production and consumption better. Governments should consult with a wide range of food stakeholders for a shared long-term vision of what constitutes a sustainable food system, e.g. ensuring better integration of food-related policies (in particular between agriculture, environment and health) and clarifying the division of competences between EU institutions, national and local governments. Governments at all levels must make sure public health, nature conservation and food systems resilience objectives are met and alter the current dominance of production, safety and free-trade oriented policies.



3. Strengthen preventive action on diet-related non-communicable diseases: as the LiveWell project showed, despite some differences, healthy and sustainable diets can be mutually reinforcing. Therefore maintaining and strengthening existing preventive action on obesity and overweight would in most cases present a win-win for both public health and environment. The number of political declarations is overwhelming, but legislative follow-up is minimal, not least because of effective lobby tactics by those with vested interests to delay progress. Public funding on obesity prevention is currently a fraction of that spent on treatment.



4. Make better use of economic governance: the LiveWell for LIFE stakeholder network stressed the importance of price in decision-making, which suggests that a greater emphasis on economic policies is needed besides information measures. The user and polluter pays principles need to be better enforced in food policy, for example by better resource pricing in agriculture eliminating harmful food taxes and subsidies favouring unhealthy and unsustainable food consumption, or charging the marketing of unhealthy and unsustainable food products. Such policy measures should be taken with care, to avoid perverse side-effects. The environmental and health cost of food production and consumption should be reflected in macro-economic governance, for example through the European semester, the EU's yearly cycle of economic policy coordination.



5. Competition policy should not eclipse sustainability objectives: the current implementation of EU competition rules actually hamper moves towards more sustainable food consumption and production by progressive member states and businesses. The EC and member states should try to find agreement on how the EU's competition policy can give a fair market environment, while at the same time set predictable frameworks to set minimum standards and stimulate front-runners on health and environment. The sustainability of the entire food chain must not be trumped by competition rules.



6. Seek local-global synergies: achieving sustainable food consumption that improves nutrition and mitigates climate change is a global challenge. The potential for replication of successful initiatives carried out outside of Europe should be assessed. At the same time, most food production and consumption decisions are still made locally, and through LiveWell for LIFE we have witnessed great energy from local governments keen to act. EU member states must make good use of this energy direct it towards international objectives on development, health and nutrition and environmental sustainability.



7. Ensure a supportive, cohesive policy environment: governments should put in place policy measures to support informed action for, and monitoring of, progress by all stakeholders. The EC should use its existing stakeholder platforms to exchange best practice between member states and other stakeholders. Existing indicators could provide better insights on whether diets are actually shifting in more healthy and sustainable directions. Common targets should support focus and effectiveness on common objectives. Research funds should be strategically directed, for instance to encourage less and better protein consumption in Europe.



8. Ensure food chain accountability: industry can be an important partner in encouraging more healthy and sustainable diets. Voluntary commitments should be underpinned by realistic targets. If these aren't met, governments need to be ready to step in with regulation. Our stakeholders told us that a large number of businesses want regulatory certainty on food sustainability, including sustainable diets⁹¹. Sustainable diet action plans should be agreed between food chain players, governments and the EU, with regular assessment on progress.



LAST BUT NOT LEAST, EACH OF US NEEDS TO CONTINUALLY IMPROVE OUR OWN FOOD CHOICES, AND HELP OTHERS TO DO THE SAME. THE LIVEWELL PROJECT HAS DEMONSTRATED THAT BY TAKING A POSITIVE AND INCLUSIVE APPROACH, THIS CAN BE EASIER THAN EXPECTED. WHAT IS NEEDED NOW IS THE POLITICAL WILL TO MAKE SYSTEMIC CHANGES TO ENSURE THE WIDESPREAD ADOPTION OF SUSTAINABLE DIETS.

⁹¹ For two good examples see the work on food by the World Business Council on Sustainable Development (WBCSD) presented by WBCSD President Peter Bakker at the 2013 Stockholm Food Forum (EAT): <http://www.eatforum.org/eat-talk/961/> And the recent European food chain stakeholder declaration 'Actions towards a more sustainable European food chain' <http://www.fooddrinkurope.eu/news/position/europes-food-chain-partners-publish-joint-declaration-on-the-sustainability/>

ANNEX 1

SUMMARY OF POLICY RECOMMENDATIONS TO ENCOURAGE MORE SUSTAINABLE FOOD CHOICES

In July 2013, the Institute of European Environmental Policy (IEEP) and bxl-law presented the outcomes of their study identifying the key EU policy options available to encourage more healthy and sustainable diets. The report was a combination of desktop studies, in-depth interviews with key experts and a workshop with a select number of key stakeholders. The concluding report explores 13 policy areas. They cover ways to support more informed choices as well as how to influence the market environment. The report also outlines which policy tools are needed to support any decisions.

The table below shows 21 policy recommendations, including their legal implications and the responsible EC directorate.

Policy area	Policy recommendation
Promotional campaigns and raising awareness among the general public	<p>To underpin and justify all other policy recommendations, information tools could be developed to spread knowledge of the carbon impact of food:</p> <ul style="list-style-type: none"> Meat-free days/weeks in EU-institutions canteens may be introduced to show the environmental cost of intensive meat production. Raising awareness in the EU of sustainable fish. DG Mare could develop a website and mobile app to provide an easily accessible source of information for consumers about the sustainability of different types of fish depending on catch location and the fishing methods used. Deeper detail could include the requirements of different certification labels, which fisheries are closed at any given point in time; the sustainability of different fishing methods, and more on which practices are legal and illegal. European Maritime and Fisheries Fund (EMFF) Marketing measures: to provide greater guidance to Member States on how to use these measures, and encourage the use of funding to promote sustainably sourced fish and a wider range of fish – including less familiar species.
Ecological footprinting	Support the Commission's proposals to develop a Single Market for Green Products (COM(2013)196), product environmental footprint (PEF) and associated category rules for food (PEFCR).

Policy area	Policy recommendation
Green Public Procurement	<p>To encourage a move towards more sustainable diets through Green Public Procurement, three primary areas could be amended:</p> <ul style="list-style-type: none"> • Amend the core and comprehensive criteria on which Green Public Procurement is assessed to include a wider suite of criteria reflecting sustainability. • Amend the guidance documentation to help the implementation of Green Public Procurement and the training toolkit to include more reference to positive environmental management activities by farmers and foresters in the EU. • Embed the implementation of Green Public Procurement policy in the core operating procedure of the main EU institutional organisations to show leadership and commitment in this area and demonstrate the effectiveness of Green Public Procurement policy.
Water pricing	<p>Continue enforcement action to ensure compliance with Article 9 of the Water Framework Directive. Enforce the ex ante conditionality relating to water pricing for the European Agricultural Fund for Rural Development (EAFRD) and Structural Funds so that funding is not given if the right water pricing measures are not in place. Support the Commission's efforts to improve the methodology for an adequate cost-recovery programme that includes environmental costs.</p>
Education	<p>Develop and implement a blueprint for classes on food, nutrition and the environment as part of the school curriculum, including more practical and dynamic educational approaches such as designing active farms or gardens to teach children about biodiversity and healthy food.</p> <p>Improve the sustainability dimension of the School Fruit Scheme:</p> <ul style="list-style-type: none"> • Include health and sustainability criteria in rules about how member states source fruit, and the types of products that are eligible for funding. • Give guidance on adding health and sustainability dimensions to any other measures used to make their schemes a success.
Direct (local) sales from farm	<p>Ensure that sustainability is included in the criteria for the proposed new optional quality term product from my farm, so farmgate sales can show how local sales and short food supply chains reduce the carbon footprint of food.</p>
Development of sustainability certification schemes	<p>The EU should continue to actively support industry and stakeholder-led initiatives to develop sustainable certification schemes for products with a high environmental footprint, such as those already under way (e.g. the Roundtable for Sustainable Palm Oil, the Roundtable on Sustainable Soy, and the Global Roundtable for Sustainable Beef).</p>

Policy area	Policy recommendation
Common Agricultural Policy (CAP)	<p>Ensure that the implementing regulations and delegated acts are drafted in such a way as to ensure sustainable outcomes, putting safeguards in place to avoid environmentally-harmful activities.</p> <p>These should encourage member states to:</p> <ul style="list-style-type: none"> • Use the facility to transfer funds from Pillar 1 to Pillar 2. • Discourage transfers of funds from Pillar 2 to Pillar 1. • Influence the design and delivery of Pillar 2 funding to support sustainable production as well as gearing marketing and information activity towards sustainability. The use of the Leader ('Links between the rural economy and development actions') approach should be promoted to develop community-based sustainable and healthy food / diet activities. • Ensure that cross-compliance, Pillar 1 greening and Pillar 2 are implemented coherently, effectively and efficiently.
Common Fisheries Policy	<p>Draft implementing regulations and delegated acts to ensure sustainable outcomes. Include safeguards to avoid environmentally-harmful activities or outcomes.</p> <p>These should encourage member states to:</p> <ul style="list-style-type: none"> • Set total allowable catches at levels that will produce stocks at levels above the maximum sustainable yield, and in the case of poor data, follow the precautionary approach to setting exploitation rates. • Implement the discard ban while doing their utmost to reduce unwanted catches, prioritising selective fishing methods, and allocating quotas to reflect the expected catch composition of species in the fisheries. <p>Influence the design and delivery of the European Maritime and Fisheries Fund (EMFF) to support sustainable production as well as the use of measures for marketing products or other information type measures to be focussed on sustainability and to promote community based activities in relation to sustainable and healthy food and diets.</p>
Labelling on recommended portion sizes	<p>Review Dir. 76/211/EEC, Dir. 2007/45/EC and Dir. 2009/34/EC with a view to developing criteria for the establishment of portion sizes. Establishing additional particulars for specific types of foodstuff (Art. 10 of Reg. 1169/2011) by adding a category 7 to Annex III to Reg. 1169/2011 by delegated act.</p> <p>This is an entirely new proposal, requiring political momentum, impact assessment and the labours of lawmaking (if delegated act proves not to be available).</p>

Policy area	Policy recommendation
Food taxes (excise taxes – consumer taxes)	<p>The EC should actively support the development of food taxes on unsustainable and unhealthy foods, such as through relevant statements in the European Semester. It could also promote the benefits of hypothecating the revenues to help boost healthy and sustainable eating patterns. This could be by funding awareness raising activities, health campaigns, fitness activities etc.</p> <p>The EC could also consider the value of introducing an EU-wide requirement relating to the taxation of unsustainable and unhealthy foods, or components of food, as long as Article 113 of the TFEU permits. It could support research to develop a robust methodology for applying a carbon tax to different types of food, particularly meat.</p>
Reduced VAT (foodstuffs/inputs/water)	Use reduced VAT rates for sustainable food as a tool for keeping the purchase of healthy and sustainable food affordable for all Europeans, including the needy. Phase out reduced rates for water supplies and distribution (this measure does not apply to drinking water for households). Phase out reduced VAT rates for chemical fertilisers and pesticides. Maintain those for non-chemical or biological fertilisers and pesticides.
TV advertising	Amend the restrictions in place on advertising of food and drinks in children's programmes and include criteria preventing adverts for unsustainable food choices or lifestyles for children and other vulnerable consumers.
Environmental claims on food	Establish criteria for substantiated green claims on food and defining sustainable diets in an amended version of Commission 2009 UCP-Guidelines. This is currently under revision, pending a new topic for guidelines.
Funding for the promotion of EU farm products (CAP market measures)	Push for the inclusion of sustainability and health criteria as part of the approval process for funding applications from member states in order to stop funding products that are not sustainable and encourage a greater focus on those that are sustainable.
Sustainable food price monitoring	Extend the mandate of the European Food Prices Monitoring Tool to collect data on retail prices of sustainable and unsustainable food.

Policy area	Policy recommendation
Non-financial reporting	<p>Ensure that non-financial information given by companies under the new rules is made available to the public in an easily accessible and digestible form. EU citizens should be able to find the information simply, and data should be categorised to allow meaningful analysis, for example by sector.</p> <p>Develop environmental criteria and indicators which companies must report to, for example, the carbon footprint. Companies must provide information on how they plan to improve performance over time.</p>
Novel foods	Use the proposed revision of the Novel Food Regulation with a view in particular to promote plant-based foods and low-carbon protein source insects.
Food labelling	<p>Extend Ecolabel to food once criteria have been established for identifying sustainable and low-carbon foodstuffs. Two options for achieving this could be considered:</p> <ol style="list-style-type: none"> 1. Identify criteria by which to assess all the certification schemes operating in the 28 member states and provide a shortlist of those that could be allocated the Eco-label. 2. Use the Product Environmental Footprint (PEF) work in relation to food to ascertain which foodstuffs are sufficiently green to be awarded the Eco-label.
	<p>Under Regulation 1151/2012 on quality schemes for agricultural products and foodstuffs:</p> <ol style="list-style-type: none"> 1. Develop some criteria to make sure all quality labelling schemes also have to adhere to a set of sustainability criteria. 2. Provide environmentally-beneficial farming systems with some form of identification through this regulation, for example, High Nature Value farming systems, as mentioned in the Commission's Communication in 2009 on agricultural product quality policy (COM(2009)234).
Restrictions on international trade	Build on the findings of ongoing research studies to consider ways of using trade policy to restrict products onto the EU market that have a high environmental footprint, particularly those that have been produced as a result of the destruction of natural habitat.
Price control	<p>Member states may be encouraged to set price limits, minimum prices or price thresholds on certain products, as long as they do not discriminate against goods imported from other member states.</p> <p>This suggests a massive intervention into how prices are fixed. Such a measure infringes market orthodoxy and will be, if implemented, contested in the judiciary of member states and eventually the European Court of Justice as has already been the case in Scotland in relation to alcohol.</p>

REFERENCES

- ARC2020. (2012) "Action plan" to improve organic production in Denmark. [Online], Available at: <http://www.arc2020.eu/front/2012/06/%E2%80%9Daction-plan%E2%80%9D-to-improve-organic-production-in-denmark/> (Accessed: 13 October 2014).
- Barilla Center for Food and Nutrition. (2012) Double Pyramid 2012: enabling sustainable food choices [Online], Parma, Italy, BCFN, Available at: <http://www.barillacfn.com/en/position-paper/buono-per-te-sostenibile-per-pianeta-modello-doppia-piramide/> (Accessed 01 October 2014).
- Barilla Centre for Food & Nutrition. (2012) Eating in 2030: trends and perspectives [Online], Parma, Italy, BCFN, Available at <http://www.barillacfn.com/en/position-paper/eating-in-2030-trends-perspectives> (Accessed 15 October 2014).
- Centro de Investigaciones sociológicas. (2014) Barometro de Mayo 2014 avance de resultados Estudio nº 3024 Mayo 2014 [Online], Madrid, Spain, Available at: http://datos.cis.es/pdf/Es3024mar_A.pdf (Accessed 1 October 2014).
- EUR-Lex. (2009) Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020') [Online], Official Journal of the European Union, no.2009/C 119/02, Brussels, Belgium, Available at: [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009XG0528\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009XG0528(01)&from=EN) (Accessed 16 October 2014).
- Council of the European Union. (2010) Council conclusions on education for sustainable development, 3046th EDUCATION, YOUTH, CULTURE and SPORT Council meeting, Brussels, 18 and 19 November 2010 [Online], Brussels, Belgium, Council of the European Union, Available at: http://consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/educ/117855.pdf (Accessed 16 October 2014).
- Darnerud, P. and Ilbäck, N. (2014) Colorectal cancer-incidence in relation to consumption of red and processed meat [Online], Uppsala, Sweden, National Food Agency Sweden, Available at: http://www.slv.se/upload/dokument/rapporter/2014_livsmedelverket_3_cancer_red_processed_meat.pdf (Accessed 5 November 2014).
- Department for Environment, Food & Rural Affairs. (2011) Attitudes and Behaviours around Sustainable Food Purchasing [Online], London, UK, Department for Environment, Food & Rural Affairs, SERP 1011/10, Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/137733/defra-stats-foodfarm-food-attitudes-report-110406-mainreport.pdf (Accessed 20 October 2014).
- Department for Environment, Food & Rural Affairs. (2013) Sustainable consumption report: Follow-up to the Green Food Project [Online], London, UK, Department for Environment, Food & Rural Affairs, Available at: <https://www.gov.uk/government/publications/sustainable-consumption-report-follow-up-to-the-green-food-project> (Accessed 20 October 2014).
- Dutch Environment Assessment Agency. (2013) De Macht van Het Menu [Online], The Hague, the Netherlands, Dutch Environment Assessment Agency, Available at: http://www.pbl.nl/sites/default/files/cms/publicaties/PBL_2013_De_macht_van_het_menu_792.pdf (Accessed on 19 October 2014).
- Eating Better (2014) Local and community supporting organisations [Online], Available at <http://www.eating-better.org/about/local-and-community-supporters.html> (Accessed on 23 October 2014).
- European Food Safety Authority. (2014) Dietary reference values and dietary guidelines [Online], Available at: <http://www.efsa.europa.eu/en/topics/topic/drv.htm> (Accessed on 20 October 2014).
- European Commission. (2008) EU GPP Criteria. [Online], Brussels, Belgium, European Commission, Available at: http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm (Accessed: 13 October 2014).
- European Commission. (2011) Buying Green! A handbook on Green Public Procurement 2nd edition [Online], Luxembourg, Publications Office of the European Union, Available at: http://ec.europa.eu/environment/gpp/buying_handbook_en.htm (Accessed 13 October 2014).

European Commission. (2011) COM/2011/0571 final. Roadmap to a Resource Efficient Europe [Online],

Brussels, Belgium, European Commission, Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52011DC0571> (Accessed 14 October 2014).

European Commission. (2011) COM(2011) 571 Roadmap to a Resource Efficient Europe [Online], Brussels, Belgium, European Commission, Available at: http://ec.europa.eu/environment/resource_efficiency/about/roadmap/index_en.htm (Accessed 14 October 2014).

European Commission. (2011) COM/2011/0244 final: Our life insurance, our natural capital: an EU biodiversity strategy to 2020 [Online], Brussels, Belgium, European Commission, Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52011DC0244> (Accessed 15 October 2014).

European Commission. (2012) Special Eurobarometer 389, Europeans' Attitudes Towards Food Security, Food Quality and the Countryside [Online], Brussels, Belgium, European Commission, Available at http://ec.europa.eu/public_opinion/archives/ebs/ebs_389_en.pdf (Accessed 17 October 2014).

European Commission. (2012) Roadmap for moving to a low-carbon economy in 2050 [Online], Brussels, Belgium, EC, Available at: http://ec.europa.eu/clima/policies/roadmap/studies_en.htm (Accessed 21 October 2014).

European Commission (2013) Flash Eurobarometer 367, Attitudes of Europeans towards building the single market for green products [Online], Brussels, Belgium, European Commission, Available at: http://ec.europa.eu/public_opinion/flash/fl_367_en.pdf (Accessed on 23 October 2014).

European Commission. (2014) Sustainable food [Online], Available at: <http://ec.europa.eu/environment/eussd/food.htm> (Accessed 13 October 2014).

European Commission. (2014) Strategy on nutrition, overweight and obesity-related health issues. [Online], Brussels, Belgium, European Commission, Available at: http://ec.europa.eu/health/nutrition_physical_activity/policy/strategy_en.htm (Accessed 10 October 2014).

European Commission. (2014) Implementation progress report of the Strategy for Europe on nutrition, overweight and obesity related health issues [Online], Brussels, Belgium, European Commission, Available at: http://ec.europa.eu/health/nutrition_physical_activity/policy/implementation_report_en.htm (Accessed 10 October 2014).

European Commission. (2014) Food Quality Certification Schemes [Online], Brussels, Belgium, European Commission, Available at http://ec.europa.eu/agriculture/quality/certification/index_en.htm (Accessed 25 October 2014).

European Commission. (2014) EU Action Plan on Childhood Obesity 2014-2020 [Online], Brussels, Belgium, European Commission, Available at: http://ec.europa.eu/health/nutrition_physical_activity/docs/childhoodobesity_actionplan_2014_2020_en.pdf (Accessed 28 October 2014).

European Commission. (2010) Green Public Procurement [Online], Brussels, Belgium, European Commission, Available at: <http://ec.europa.eu/environment/gpp/pdf/brochure.pdf> (Accessed 15 October 2014).

EU Food Sense. (2013) Background [Online], Available at: <http://www.eufoodsense.com/background/4581192649> (Accessed 7 October 2014).

Eur-Lex. (1998) Case C-210/96 – Gut Springenheide [Online], Strasbourg, France, European Court, Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:61996CJ0210> (Accessed October 2014).

European Union. (2014) The European Union explained: Budget [Online], Luxembourg, Publications Office of the European Union, Available at: http://europa.eu/pol/financ/index_en.htm (Accessed 29 October 2014).

European Parliament Legislative Observatory. (2013) European gastronomic heritage: cultural and educational aspects [Online], Brussels, Belgium, EP, Available at: [http://www.europarl.europa.eu/oeil/popups/ficheprocedure.do?lang=en&reference=2013/2181\(INI\)#keyEvents](http://www.europarl.europa.eu/oeil/popups/ficheprocedure.do?lang=en&reference=2013/2181(INI)#keyEvents) (Accessed 04 October 2014).

European Parliament. (2014) European Parliament's Sustainable Food Conference [Video clip], [Online], Available at: <http://www.europarl.europa.eu/ep-live/en/other-events/video?event=20140402-0900-SPECIAL-UNKN> (Accessed 13 October 2014).

Faber, J. et al. (2012) Behavioural Climate Change Mitigation Options [Online], Delft, the Netherlands, CE Delft, Available at: http://ec.europa.eu/clima/policies/roadmap/docs/food_report_en.pdf (Accessed 11 October 2014).

Fogelberg, C. L. (2008) Towards environmentally sound dietary guidelines – scientific basis for environmental assessment of the Swedish national food agency's dietary guidelines [Online], Uppsala, Sweden, Ideon, Agro Food, Available at: <http://www.slv.se/en-gb/Group1/Food-and-environment/Eco-smart-food-choices/> (Accessed 5 November 2014).

FoodLinks. (2013) Revaluing public sector food procurement in Europe: an action plan for sustainability [Online], the Netherlands, Wageningen University, Foodlinks Project, Available at http://www.foodlinkscommunity.net/fileadmin/documents_organicresearch/foodlinks/publications/Foodlinks_report_low.pdf (Accessed 5 November 2014).

Food and Agriculture Organization of the United Nations. (2010) Sustainable diets and Biodiversity, Directions and solutions for policy, research and actions. Proceedings of the International Scientific Symposium Biodiversity and sustainable diets united against hunger. [Online], Rome, Italy, Food and Agriculture Organization of the United Nations, Available at <http://www.fao.org/docrep/016/i3004e/i3004e.pdf> (Accessed 5 November 2014).

Food and Agriculture Organization of the United Nations. (2014) Global initiative on food loss and waste reduction [Online], Rome, Italy, Food and Agriculture Organization of the United Nations, Available at <http://www.fao.org/3/a-i4068e.pdf> (Accessed 5 November 2014).

Food and Agriculture Organization of the United Nations, International Fund for Agricultural Development and World Food Programme. (2014) The state of food insecurity in the world. Strengthening the enabling environment for food security and nutrition [Online], Rome, Italy, Food and Agriculture Organization of the United Nations, Available at <http://www.fao.org/3/a-i4030e.pdf> (Accessed 23 October 2014).

FoodDrinkEurope. (2014) Europe's food chain partners publish joint declaration on the sustainability of food systems, [Online] Available at: <http://www.fooddrinkeurope.eu/S=0/news/position/europes-food-chain-partners-publish-joint-declaration-on-the-sustainability/> (Accessed 5 November 2014).

Foresight. (2011) Future of food and farming: final project report [Online], London, UK, Government Office for Science, Available at: <https://www.gov.uk/government/publications/future-of-food-and-farming> (Accessed 5 November 2014).

French Government. (2013) Table ronde n°5, éducation à l'environnement et au développement durable, Document de travail [Online], Paris, France, French Government, Available at: http://www.developpement-durable.gouv.fr/IMG/pdf/Conf_envi_2013_Fiche_Table-Ronde_No5.pdf (Accessed 23 October 2014).

Esnouf, C. et al. (2011) duALIne – durabilité de l'alimentation face à de nouveaux enjeux [Online], France, INRAD and CIRAD, Available at: <http://www.cirad.fr/en/publications-resources/publishing/studies-and-documents/dualine> (Accessed 5 November 2014).

Etiévant, P. et al. (2010) Les comportements alimentaires. Quels en sont les déterminants? Quelles actions, pour quels effets? [Online], France, INRAD, Available at: <http://www6.paris.inra.fr/depe/Projets/Les-comportements-alimentaires> (Accessed 5 November 2014).

Health Council of the Netherlands. (2011) Guidelines for a healthy diet: the ecological perspective [Online], The Hague, the Netherlands, Health Council of the Netherlands, Available at: <http://www.gezondheidsraad.nl/en/publications/healthy-nutrition/guidelines-healthy-diet-ecological-perspective> (Accessed 5 November 2014).

IKEA. (2013) IKEA [Online], Available at: http://www.ikea.com/ms/en_GB/about-the-ikea-group/people-and-planet/energy-and-resources/ (Accessed 22 October 2014).

IKEA. (2014) Corporate news, IKEA meatballs and sustainability, [Online], Available at: http://www.ikea.com/us/en/about_ikea/newsitem/042214-meatballs-sustainability (Accessed 22 October 2014).

Intergovernmental Panel on Climate Change. (2014) Climate change 2014 – Mitigation of climate change, [Online], Available at <http://www.ipcc.ch/report/ar5/wg3/> (Accessed 10 October 2014).

Kaukewitsch, R. (2013) EU Green Public Procurement Policy [Online], Brussels, Belgium, European Commission Environment Directorate-General Webinar Organising GPP internally 'How to get it right', Available at http://ec.europa.eu/environment/gpp/pdf/26_11_2013/Organising%20GPP%20internally%20DG%20ENV.pdf (Accessed 13 October 2014).

LiveWell for LIFE. (2012) A balance of healthy and sustainable food choices for France, Spain, and Sweden [Online], Godalming, UK, WWF-UK, Available at: <http://livewellforlife.eu/wp-content/uploads/2013/02/A-balance-of-healthy-and-sustainable-food-choices.pdf> (Accessed 5 November 2014).

LiveWell for LIFE. (2013) Adopting healthy, sustainable diets: key opportunities and barriers [Online], Woking, UK, WWF-UK, Available at: <http://livewellforlife.eu/wp-content/uploads/2013/05/Adopting-healthy-sustainable-diets-report.pdf> (Accessed 19 October 2014).

LiveWell for LIFE. (2014) Value your food conference [Online], Available at: <http://livewellforlife.eu/value-your-food-conference> (Accessed 19 October 2014).

Løes, A.K. et al. (2011) Innovative public organic food procurement for youth (iPOPY) [Online], Tingvoll, Norway, Bioforsk Organic Food and Farming, Available at: https://djfextranet.agrsci.dk/sites/coreorganic_ipopy/public/Documents/iPOPY_final%20report.pdf (Accessed 5 November 2014).

Macdiarmid, J. et al. (2011) LiveWell: a balance of healthy and sustainable food choices [Online], Godalming, UK, WWF-UK, Available at: http://assets.wwf.org.uk/downloads/livewell_report_jan11.pdf (Accessed 5 October 2014).

Ministère de l'Ecologie, du Développement durable et de l'Energie. (2014) Display of the environmental footprint of products: French developments [Online], Available at <http://www.developpement-durable.gouv.fr/Product-Environmental-Footprint.html> (Accessed 10 October 2014).

Molden, D. (2007) Water for food Water for life, A comprehensive Assessment of Water Management in Agriculture [Online], London, UK, Routledge, Available at <http://www.routledge.com/books/details/9781844073962/> (Accessed 15 October 2014).

Nordic Council of Ministers. (2014) Nordic Nutrition Recommendations 2012: Integrating nutrition and physical activity [Online], Copenhagen, Denmark, Nordic Council of Ministers, Available at: <http://www.norden.org/en/theme/nordic-nutrition-recommendation> (Accessed 5 November 2014).

Regeringskansliet. (2008) Sweden – the culinary nation [Online], Sweden, Ministry of Agriculture, Available at: <http://www.regeringen.se/content/1/c6/10/93/16/3e24ad40.pdf> (Accessed 22 October 2014).

Rio+20. United Nations Conference on Sustainable Development (2012) The Future We Want [Online] Rio de Janeiro, Brazil, Rio+20 United Nations Conference on Sustainable Development, Available at: <http://www.uncsd2012.org/content/documents/727The%20Future%20We%20Want%2019%20June%201230pm.pdf> (Last accessed 22 October 2014).

Rockström, J. (2009) 'A safe operating space for humanity', Nature, vol. 461, pp 472-475.

Schössler, H. and Hedlund-De Witt, A. (2012) Sustainable protein consumption and cultural innovation – what business, organisations, and governments can learn from sustainable food trends in Europe and the United States, [Online], Amsterdam, the Netherlands, IVM, Institute for Environmental Studies, Available at: http://www.ivm.vu.nl/en/Images/Sustainable%20protein%20consumption%20and%20cultural%20innovation_tcm53-263438.pdf (Accessed 5 November 2014).

Sonigo, P. et al. (2012) Policies to encourage sustainable consumption, [Online], Brussels, Belgium, European Commission (DG ENV), Final report 2012-061, Available at http://ec.europa.eu/environment/eussd/pdf/report_22082012.pdf (Accessed 05 November 2014)

Storcksdieck genannt Bonsmann, S., Kardakis, T., Wollgast, J., Nelson, M. and Caldeira, S. (2014) Mapping of National School Food Policies across the EU28 plus Norway and Switzerland [Online], Ispra, Italy, European Commission Joint Research Centre, Available at: <https://ec.europa.eu/jrc/sites/default/files/lbna26651enn.pdf> (Accessed 17 October 2014).

The Stakeholder Dialogue Group on Food Sustainability. (2014) Actions towards a more sustainable European Food chain, [Online], Brussels, Belgium, FoodDrinkEurope, Available at: http://www.fooddrinkeuropa.eu/uploads/press-releases_documents/Declaration_Sustainability_of_Food_System.pdf (Accessed 5 October 2014).

The Swedish Environmental Management Council. (2014) SEMCO Procurement criteria – food. [Online], Available at: <http://www.msr.se/en/Home/Procurement/SEMCO-Procurement-criteria/Food/> (Accessed 13 October 2014).

TNS Opinion & Social. (2012) Special Eurobarometer 389. Europeans' attitudes towards food security, food quality and the countryside [Online], Brussels, Belgium, European Commission, Directorate-General for Communication, Available at: http://ec.europa.eu/agriculture/survey/2012/389_en.pdf [last accessed October 2014]. (Accessed 5 November 2014).

UNESCO. (2010) Gastronomic Meal of the French [Online], Available at: <http://www.unesco.org/culture/ich/index.php?RL=00437> (Accessed 27 October 2014).

UNESCO. (2013) Mediterranean diet, [Online], Available at: <http://www.unesco.org/culture/ich/RL/00884> (Accessed 27 October 2014).

United Nations Department of Economic and Social Affairs. (2004) World Population to 2300, New York, USA, United Nations, Available at: <http://www.un.org/esa/population/publications/longrange2/WorldPop2300final.pdf> (Accessed 14 October 2014).

Van Dooren, C. & Kramer, G. (2012) Food patterns and dietary recommendations in Spain, France and Sweden [Online], Woking, UK, Voedingscentrum & Blonk Milieu Advies, LiveWell for LIFE, Available at: http://livewellforlife.eu/wp-content/uploads/2012/04/LW_A4-Food-Rept_Update_final.pdf (Accessed 5 November 2014).

Vanham, D., Mekonnen, M. M. and Hoekstra, A. Y. (2013) 'The water footprint of the EU for different diets', Ecological Indicators, vol 32, [Online], Available at (<http://www.sciencedirect.com/science/article/pii/S1470160X13000940> / (Accessed 5 November 2014).

Vieux, F. et al. (2013) 'High nutritional quality is not associated with low greenhouse gas emissions in self-selected diets of French adults', The American Journal of Clinical Nutrition, vol. 97, no. 3, pp. 569-583 [Online] Available at: <http://ajcn.nutrition.org/content/early/2013/01/30/ajcn.112.035105.abstract?sid=2aad825c-7b40-4a92-a198-2a6483ce1032> (Accessed 5 November 2014).

Westhoek, H. et al. (2011) The protein puzzle. The consumption and production of meat, dairy and fish in the European Union. The Hague: Dutch Environmental Assessment Agency (PBL).

Westhoek, H. et al. (2014) 'Food choices, health and environment: Effects of cutting Europe's meat and dairy intake', Global Environmental Change vol. 26, pp 196-205, [Online], Available at: <http://www.sciencedirect.com/science/article/pii/S0959378014000338> (Accessed 5 November 2014)

Which? (2013) Rising food prices are hard to digest. Which? reveals rising food prices are a worry [Online], Available at: <http://www.which.co.uk/news/2013/09/rising-food-prices-are-hard-to-digest-334082/> (Accessed 5 November 2014).

Which? (2010) Making Sustainable Food Choices Easier [Online]. London, UK, Which?
Available at: <http://www.which.co.uk/documents/pdf/making-sustainable-food-choices-easier-which-report-231317.pdf> (Accessed 5 November 2014).

World Business Council for Sustainable Development. (2014) Opportunities for large business alliances to affect transformative change in food systems, presented by WBCSD President Peter Bakker [Video], Available at <http://www.eatforum.org/eat-talk/961/> (Accessed 5 November 2014).

World Health Organization. (2013) Media Centre, Fact sheet N°312 Diabetes [Online],
Available at: <http://www.who.int/mediacentre/factsheets/fs312/en/> (Accessed 12 October 2014).

World Health Organization (2014) Media Centre, Fact sheet N°311 Obesity and overweight, [Online], Available at: <http://www.who.int/mediacentre/factsheets/fs311/en/> (Accessed 12 October 2014).

LiveWell in numbers

2.6 PLANETS

If everyone were to live as an average European, we would need 2.6 planets to sustain us

46%

Eating animal products accounts for 46% of the EU's total water consumption

50%

It's estimated that 50% of the population in Europe is obese or overweight

25%

Following the LiveWell diet can help us achieve a 25% reduction in greenhouse gas emissions from the EU food supply chain



LiveWell
for LIFE

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The project is funded with the contribution of the EU's LIFE+ Programme for the Environment.