LIVEWELL FOR LIFE – FREQUENTLY ASKED QUESTIONS

1. **What is sustainable diet?**

To be truly sustainable we need to look at all the environmental, social and economic impacts of the food we eat; this would be an enormous task. With its focus on mitigating greenhouse gas (GHG) emissions, the LiveWell diet[1] is more specifically a low-carbon diet, but the project looks at health, nutrition and affordability as well.

We believe this project and the LiveWell diet is a *first step* towards defining a sustainable diet; its aim is to open the debate and to get the European Commission to look at sustainable diets as part of a future policy agenda.

Other areas of specific interest to WWF are water, land, nitrogen and biodiversity. We recognise the need for these issues to be part of a final definition of a sustainable diet, but all are outside the scope of our report *A balance of healthy and sustainable food choices for France, Spain and Sweden*. Though LiveWell for LIFE is not going to work on these issues we do recognise this omission and would support others working on them in conjunction or as follow up projects.

Within the project remit, what we can say is that the LiveWell diet is healthy, affordable and will lead to a 25% cut in GHG emissions. The main saving will be through switching from high impact foods to lower impact food like vegetables. These foods normally require less land, water and fertilisers. As a result, a switch to the LiveWell diet will address other environmental concerns.

2. **Why is LiveWell only aiming for a target of 25% in GHG emissions? Greater reductions are possible.**

Research shows that a diet with GHG cuts beyond 25% is possible, but it would be very different from current diets and is therefore likely to be rejected.

One of the key concerns to LiveWell is acceptability. The LiveWell diet has a realistic target of 25% reduction in GHGs, and a diet which is familiar and varied; our work shows this is a realistic, recognisable target.

3. **Are there any further research recommendations?**

A balance of healthy and sustainable food choices for France, Spain and Sweden demonstrates that healthy sustainable food choices are possible in a variety of different countries, and the LiveWell Plate[2] can be adapted and acceptable in a variety of different contexts. But, it also points to further research and analysis needs which should be done to make this work more precise and help guide stakeholders.

[1] The LiveWell diet is a healthy, low-carbon diet that takes account of cultural preferences. We believe the LiveWell diet is a good first step towards a more sustainable diet. Its focus is on mitigating GHG emissions, but it incorporates health, socio-cultural, economic and qualitative elements as well.

[2] 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 is nutritionally viable. LiveWell Plates have been developed for France, Spain and Sweden – three pilot countries chosen for their differing dietary contexts and levels of policy readiness to adopt the LiveWell diet.

These include:

- Research to collate better GHG and life cycle assessment (LCA) data to improve modelling and guidance for stakeholders.
- Research into other factors which can affect the degree to which GHG emissions can be reduced – such as eating seasonal foods, and different ways of preparing food – including the effect of this on bioavailability of nutrients. These are complex factors which our modelling could not take into account.
- Further research into the effect of sustainable diets on supply and pricing, including subsidy systems for farmers. We note that there are connections between supply of different items – for example meat and dairy production – which would need to be taken into account.
- Consideration of minority and regional diets, or even individual diets, rather than looking at a single sample diet for each country.
- Research into the consequences of including wider sustainability criteria – for example water and biodiversity – and possible technological approaches in areas such as the production and distribution of food.

4. Why are you not comparing the three countries?

There is an inevitable temptation to try to compare the LiveWell diets in the three countries and derive conclusions form this. Who has the most sustainable diet? Why do people in one country eat more fruit than another? Why does the other country have more meat in the diet? And so on.

However, comparison between the three countries can be invidious and can easily become a comparison of cuisine and eating habits rather than balancing health, cost and sustainability. We would like to urge caution in terms of comparisons for a number of reasons:

- We have tried to develop the diets with national acceptability in mind and the cuisine of the three countries is quite different. We have for example 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.
- The models work with slightly different data. The French model was produced with women only data (as with the original Livewell UK), but because of availability of data, Spain and Sweden are presented for an “average” person. Nutritional recommendations are averaged accordingly where they are different for men and women.
- We highlight that nutritional recommendations vary considerably between countries. We have sought to comply with these national recommendations, which in turn have an effect on the foods selected for each Plate. Running a model for Spain with Swedish

nutritional recommendations would inevitably produce an inappropriate LiveWell Plate for Spain.

- The degree to which food-based dietary guidelines are used as a constraint varies between countries. For France, we interpreted the principles and used these within the model. For Sweden, the general principle of variety within the Food Circle was used, keeping variety similar to that of the current diet. For Spain, food-based dietary guidelines were found to be too difficult to quantify and therefore constraints were chiefly based on acceptability criteria.

- Absolute figures are not comparable. The selection of foods and quantities in the model is based on relative values, not absolute ones. So, we spent time adjusting the data (particularly for carbon, but also for cost) for Sweden and Spain to ensure the figures are consistent. Moreover, the GHG emission figures we used for Sweden is an estimate of the figure for the life cycle to the *consumer,* whereas for France and Spain the figure used is to *retail* only.

- Owing to the detail coming from dietary surveys, the number of different foods in the model varies between countries (68 for France, 277 for Spain, and 88 for Sweden). This affects the development of the different diets: a greater number of foods produce a wider number of different solutions.

5. What are the common features between the pilot countries?

A number of overall similarities between the three nutritious low GHG emissions diets were observed in our research:

- All diets show a reduction in the total amount of foods consumed in the meat group. This is inevitable since these are the foods with the highest GHG emissions.

- As sources of protein, all diets show an increase in the consumption of legumes. This again is inevitable owing to the lower GHG emissions of legumes relative to most other sources of protein, even if they are imported long distances. In addition, this may help to keep the food budget constant or even to decrease it because legumes are not as costly as meat.

- All diets show an increase in cereals and starchy foods, typically bread, pasta and potatoes.

- Levels of consumption of dairy products remain relatively similar to current consumption.

6. Why are you not telling everyone to go vegetarian or vegan?

In general, the footprint of meat and dairy products is much higher than that of other food: livestock production uses large amounts of land, water and energy. If you wish to reduce your footprint, one effective way would be to reduce the amount of meat

and dairy that you eat, whilst taking into account nutritional requirements.

One drawback often found with people going vegetarian is that they swop meat for dairy; this will not reduce their carbon or water footprint, in fact it might increase it. You need to swop meat for non-meat sources or protein likes nuts and beans (see below).

WWF does not advocate that everyone becomes vegetarian, but we encourage people to consider reducing consumption of high impact food, and to increase the quality of their food when possible and affordable. It is every individual's right to make their own dietary choices, but with this right comes the responsibility to consider the impact of the choices we make on other people and the environment. In order to do so, it is important that we have as much accurate information as possible about these impacts. This is why WWF aims to raise awareness of the environmental and social impact of food.

In order to address environmental problems such as climate change at the scale and urgency required, we believe that changes need to be made not only in diet but also in other lifestyles choices in the developed world, such as travel and energy use in the home. We do not consider these changes to be sacrifices – sustainable lifestyles should lead to a better quality of life and increased human well-being.

7. How much meat should I eat then?

Meat is a particularly emotive and complex issue. When thinking about meat it is important to recognise the differences and the costs and benefits of the various production systems. As well as looking at how meat is reared you need to take into account the inputs: primarily feed and water, land use and GHG emissions, carbon sequestration, impacts before and after farm gate and the total amount eaten not only gram for gram costs.

Meat – red and white – is an excellent source of protein, for some the best and most affordable form of protein and other nutrients. But it has to be eaten in the right quantities and it cannot be omitted that there are other forms of protein (see below). WWF would suggest that for environmental reasons protein reductions should come from livestock products.

There are many easy ways to reduce your meat consumption – for example it's not that difficult to turn your chicken stew into a chicken and vegetable stew.

8. White meat is better than red, isn't it?

We no longer consider it fair to say white meat is better than red meat, or people should swop red for white, or vice versa.

Like red meat, white meat is an excellent source of nutrients and can be low fat depending on the species and production method, and in the right quantities it is an excellent addition to a diet.

Consumption trends show that EU red meat consumption has stayed relatively level since 1961;

however chicken consumption has increased by 400% and pork by 80%. The day of the chicken being an occasional treat is gone – it is ubiquitous in sandwiches, ready meals, salads and fast foods. Around half of soya in the EU is fed to chickens – with an additional impact in terms of vital biodiversity in areas like the Cerrado in Brazil.

It is this growth in total consumption that causes concern. As gram for gram, white meat is better for the environment but when you incorporate total consumption the difference are less clear and if you take a total lifecycle assessment the line is increasingly blurred (see below).

9. And processed meat?

This can be an excellent use of the less popular cuts of meat, and covers cold cuts, bacon, sausages, salami, chorizo and so on. However, it has been shown to pose serious health concerns. The World Cancer Research Foundation recommends avoiding processed meat. Research by the Scientific Advisory Committee on Nutrition (SACN) shows that eating red and processed meat probably increases the risk of bowel cancer. In order to reduce this risk, meat eaters should only eat 70g red meat per day and avoid processed meat.

10. Why are you not telling people to eat less dairy?

This is a tricky one. We fully recognise the impacts of dairy production, from carbon to land-use change, and if this was a purely environmental study we would say: eat less dairy.

From a health perspective, dairy contains animal fats that – if high levels are eaten – raise the cholesterol levels, and is linked to certain cardiovascular diseases in relation to the traditional diet. But, in the right quantities dairy is an excellent source of calcium – though by no means the only source – and other nutrients. Dairy is also readily available. When we studied current consumption patterns using government data and compared these to nutritional guidelines, it turned out that most people eat about the right amount of dairy. It should be noted that in Spain – and in the Mediterranean region in general – there is a low tolerance to lactose in milk, due to the traditionally low consumption in this area. By contrast, in the Northern or middle European countries the tolerance is higher as a result of higher milk consumption level.

We also found that people could still eat the current amount of dairy and reduce their carbon footprint of food by 25%. As we are an evidence-based organisation and this is what the evidence reported, we find there is no need to tell people to eat less dairy. Of course they can diversify, as cows are not the only animals that provide us with diary.

If people want to eat less dairy then we recommend they eat the correct alternatives such as tofu, green leafy vegetables like kale, some breads, soya milk, kidney beans and eggs, all of which contain vitamin D and calcium.

11. What are other sources of protein?

A wide range of foods are protein sources and the best combination of protein sources depends on the

region of the world, access, cost, amino acid types and nutrition balance, as well as acquired tastes.

On a worldwide basis, plant protein foods contribute on average over 60% of the per capita supply of protein. While in North America, animal-derived foods contribute about 70% of protein sources.

Meat, eggs and fish are sources of complete protein. Milk and milk-derived foods are also good sources of protein.

Vegetarian sources of proteins include whole grains and cereals, legumes, nuts, seeds and fruits. Legumes have higher concentrations of amino acids and are more complete sources of protein than whole grains and cereals.

Legumes are rich in lysine and threonine, aminoacid that cereals lack. Meanwhile, cereals are rich in cysteine and methionine (sulfur amino acids needed to synthesize the essential amino acid called taurine in the presence of vitamin B6 and not found in vegetables) that you can't find in legumes. Therefore the combination of both – cereals and legumes – offers the whole range of quality proteins.

Examples of vegetarian protein sources include soybeans, lentils, kidney beans, white beans, mung beans, chickpeas, almonds, Brazil nuts, cashews, pecans, walnuts, cotton seeds, pumpkin seeds, sesame seeds, and sunflower seeds, oats, rye, millet, maize (corn), rice, wheat, spaghetti, bulgar, sorghum, amaranth, and quinoa.

12. What about food miles? Is local better?

In a nutshell, as with everything about food, it's complicated. It depends on the transportation used and the definition of local food.

The impact on the environment from transportation is often a minor part of food's overall impact, and a lot of this takes place when we travel to and from the shops. And, it is possible to buy a product, say a pie, that is made locally but the ingredients come from all over the world with different production systems. The pie is global but made locally.

If you know the providence of the product – how it was grown, transported and made – and you are happy, then local is a great way forward as it might have a lower footprint and you are supporting local communities.

The debate is even more complicated if looking at local on an EU level. If the EU was entirely self-sufficient, this would arguably increase the vulnerability of the nations' food supply to bad weather, disease and crop failures. But if you don't support your own agriculture, you increase your vulnerability and you can lose some of the associated environmental benefits as well. Our farmers are disappearing and with this their expertise. In addition, agricultural inputs such as fertilisers, machinery and energy supplies would continue to be imported.

Furthermore, millions of people in developing countries depend on agricultural exports to the EU for a living. To suddenly stop importing food would be damaging the economic and social structures of

many developing countries that we have encouraged to grow food for our plates. This damage would cause significant social problems and could result in widespread ecological damage as communities seek new ways to survive.

'Self-sufficiency' is therefore unfeasible in the current global system, but food sovereignty – where people decide their own food systems – is a concept we agree with. There are many foods and products – such as coffee, cocoa and some tropical fruits – that do not grow in the EU but will continue to be part of a shopping basket. If a food cannot be grown in the EU, we would advocate buying responsibly-sourced foods from other countries, while trying to ensure the majority of food and drink bought is seasonal and local to you.

What about seasonality?

Often when we talk about seasonal food we mean local or national seasonal food; we are trying to eat within a natural cycle. Traditionally if we wanted strawberries or peas out of season they were preserved somehow by freezing, canning, pickling or making jams.

On the whole, seasonal food is more sustainable; it uses less energy and less GHG if it has not been force-grown out of season. But, increasingly we have got used to having what we want when we want it. Now, local and seasonal do not necessarily mean the same things; it is possible to buy something that is locally produced out of season – like tomatoes in Northern France in winter – and it is possible to buy something from the other side of the planet that is in season there.

So, today the only true way to eat seasonally is to learn what is in season *both at home and abroad.* This is especially useful in countries that have shorter growing seasons and more of the hungry months, such as Sweden.

So, eating seasonally is a great way to eat but it is not a simple mantra; there are many considerations, often more than people have time to digest.

We could look at how the food is grown: it is grown outdoors? Intensively? How was it transported to market? Who grew it? Is it certified?

We could look at the type of food grown: It is a traditional crop from the country or has a market developed as our tastes have? Is it a native crop? Has it been adapted to a new location? For example, tomatoes, chillies and potatoes come from South America but are now grown across the world.

We also need to consider climate change and how this is changing the growing seasons and in some cases locations – you can now grow peaches in the UK! All of this impacts on how we look at seasonality.

Eating seasonably is not an either-or choice: you can eat seasonally and locally when harvest allows, and you can ensure that when buying others crops you support small-scale producers in developing countries. We can eat local seasonal food suited to growing where we live, and more exotic foods grown by producers elsewhere.

And, if we want more traditional food out of season there is nothing wrong with a tin of tomatoes, or some frozen berries.

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13. So, where does this leave tins and frozen food?

If a Swedish person, for examples, really wants local food that has been grown seasonally all year round this could be the best option. They are still full of goodness, sometimes more due to the rapid preserving techniques used, but they might have a different footprint due to packaging and storage.

14. What about organic?

Organic food is good for many reasons, including local biodiversity and reduced reliance on fossil fuel-based fertilisers and chemical pesticides – WWF would certainly recommend buying organic.

The methods used in organic farming aim to sustain or build soil fertility, minimise damage to the environment, and minimise the use of non-renewable resources. Strict regulations define what organic farmers can and cannot do. Organic farmers cannot grow genetically modified crops, are severely restricted in the use of artificial chemical fertilisers and pesticides, and raise livestock without routine use of drugs and antibiotics. The result is food which is GM-free, lower in pesticide residues and has fewer additives.

But buying organic food isn't always an affordable solution for everyone. Moreover, organic food generally requires more land to produce the same amount of food than intensive systems. *Therefore, if organic became the accepted way of producing food there is a possibility that more land would be required to produce sufficient food, resulting in less land being available for biodiversity.*

Additionally, choosing organic food need not necessarily mean that you are automatically opting for a low food footprint. Again there are all the considerations addressed above relating to locally produced food and seasonality. As with all food, choosing organic food produced out of season can mean that food has been grown either in heated greenhouses – in for example Sweden – or abroad which might mean large amounts of energy used either for heating or transport.

As we've seen with the LiveWell principles, there are other food choices you can make that still have a powerful positive impact on the environment beyond eating organic.

15. How does LiveWell fit in with fair-trade/ organic/ local food/ eating the seasons etc.?

All of these are different production systems – producing foods that give farmers a fair price or meet certain standards. These all have their own merits.

LiveWell is at a level above this – *it looks at what we* actually *consume irrespective of the way it's produced.* This makes it, we think, a very inclusive proposal as it's easy to understand and easy to do. Eat more plants and less meat/highly processed foods. There's no labelling you need to understand and there's no price premium. We are not saying we are not concerned with how food is produced; we are saying is outside the purpose of *this* work.

Once you follow the LiveWell principles you can choose to support any or all of these very worthy issues.

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16. What about bioavailability?

Not everything we eat gets absorbed and used by our body. Our digestive process destroys and degrades nutrients before our body can use it. The amount of nutrients that are absorbed is called bioavailability.

Understanding how different foods react with one another can help you get more nutrients from your meal. How you combine your foods will impact on bioavailability.

For example, tomatoes have lycopene, a great antioxidant that is much better absorbed when cooked. Fresh tomatoes have a total antioxidant potential of about 80. But boil or can them, and the antioxidant potential goes up five or six-fold.

Something can have great bioavailability on its own but when cooked or combined with something else the bioavailability decreases. Again this is not a simple measure.

17. What about animal welfare?

WWF is a biodiversity conservation organisation whose core mission is to create a planet where humans can live in harmony with nature. We focus on finding solutions to key environmental issues, such as climate change and biodiversity loss. Although we are not an animal welfare organisation, we believe farming systems should not compromise an animal's welfare. But, issues of animal welfare in farming are complex and for this reason we can't have a strict position on this. We do not have the expertise to judge this and so defer to others like WSPA and Compassion in World Farming on these issues.

18. Why are some footprints different?

There are different ways to measure the impact of a product, it depends on data available and how much you want to record. The production, processing, transportation, and packaging of food can all have impacts. They are direct and indirect and can be hard to measure. The extent of the measurable impact depends on the starting point. Some only look at on-farm, others carbon or water. While others studies take a full life cycle analysis which looks at what happens before, during and after production.

Take a chicken. You can measure the direct footprint of the bird during its life, up to the farm gate and this is quite favourable. The footprint increases when you incorporate consumption, waste and the footprint of the storage. It will still look favourable gram for gram from a carbon perspective compared to beef.

But, this becomes less favourable when you scale up the extra amount of chicken that the average person eats compared to the amount of beef (see above). The narrative becomes more blurred when you include its food. You need to grow crops, including soya. To grow anything you need fertilisers, land, pesticides and more water. The fertilisers are often oil based and contain large amounts of nitrogen. The excess fertilisers and pesticides often end up in aquifers or river, which can cause eutrophication. Excessive nutrients in the water cause oceanic deadzones. These can be found at the end of every major river in the world and cause the death of many marine organisms.

Back to the crop: any large scale farming involves ploughing, which leads to the release of carbon and soil erosion and loss of soil biodiversity which is vital for life on this planet. The use of pesticides results in contamination, loss of wild flora and fauna, with the plight of insects being perhaps the most worrying. Land that is turned over to farming no longer contains as much biodiversity, a further cost. This is most noticeable when turning land over to grow soya in South America.

A side issue is the loss of agro biodiversity as we increasingly draw our chickens and soya from a limited gene pool that is programmed to be the most productive. The vulnerability of this is demonstrated with the 2012 US drought, which devastated soya and grain crops. As these make up the majority of a chicken's food, any decrease in supply and increase in prices will affect the cost of the chicken or egg.

When taking a step back and looking at the whole picture – which LiveWell believes we must do – the low carbon cheap piece of chicken actually has a far higher footprint than sometimes presented, and when compared to a free-range upland reared sheep or cow it no longer appears so virtuous.

And this is before you compare nutrient levels, especially how the feed impacts on the nutrients in the animal and the use of antibiotics, and consider social implications like land rights and the prices paid to farmers.

19. How do I know seafood is sustainable?

Choose Marine Stewardship Council (MSC) certified fish products whenever you can. Several fisheries around Europe are already MSC-certified, and some fisheries are working towards certification. You can find products as diverse as langoustine and sole. Several major supermarkets have committed to sell nothing but MSC-certified fish in the future, so the choice will expand rapidly over the next few years.

If MSC is not available, WWF recommends you follow these guidelines:

- Diversify! Try different species as alternatives to your traditional choice.
- Buy locally-caught fish. This will support the local economy and fishing industry and also helps to ensure your fish is fresh.
- Ask your fishmonger how the fish was caught. Traditional methods such as lines, creeling, setting traps (i.e. lobster pots) and using divers can be better than less selective nets such as trawls. These methods can target fully-grown fish and tend to be better at avoiding other species.
- Get to know your local fishmonger. Let your fishmonger know you are a discerning consumer and that you want to know what you're eating.
- Follow the recommendations of the Fish Consumption Guidelines from WWF[3].

[3] http://www.wwf.es/que_hacemos/mares_y_costas/nuestrs_soluciones/pesca_sostenible/consumo_responsable/guia_de_consumo_responsable_de_pescado/

20. Should I buy farmed or wild-caught fish?

Aquaculture is not an alternative to overfishing, it is an additional practice of the sustainable fishing. It is important not to encourage to the overconsumption of fish products. Aquaculture is not a solution by itself. The fishes must be low in the food chain and the criteria must be sustainable.

Aquaculture – or fish and shellfish farming – is the fastest growing food production system in the world, and if done responsibly, is a viable way to meet the huge demand for seafood. Fish farming is already a significant contributor to the supply of seafood producing half the world's fish and shellfish. Responsible fish and shellfish farming is absolutely essential for the future of our food and our seas if we are to meet the growing demand for seafood in the future. As with all farming there are environmental impacts from fish farming. Most supermarkets already have Codes of Practice for responsible sourcing of farmed fish and shellfish.

21. What is the Aquaculture Stewardship Council?

WWF is working with a huge number of different stakeholders to create standards that will measurably reduce the key impacts associated with the industry. The standards will be managed by an organisation known as the Aquaculture Stewardship Council (ASC).

Since the process to set up the ASC began in 2004 with a series of multi-stakeholder roundtables known as the Aquaculture Dialogues, a significant amount of funding has been invested in engaging stakeholders in the process and ensuring that the dialogue is not industry-based, but a balanced view of all stakeholders. More than 35 Aquaculture Dialogue meetings have been held in the world's most prominent aquaculture regions. This includes shrimp meetings in Asia and South America last year, and salmon meetings in Scotland. The dialogues are open to anyone and WWF encourages all stakeholders – not just industry players – to engage with them.

By the end of 2013 there will be ASC certified products on the market with an ASC label. Look out for the label and buy these fish and shellfish.

22. What is Livewell UK?

The UK report *Livewell – a balance of healthy and sustainable food choices* from 2011 uses the UK government's own nutritional guidelines as a base. It illustrates a nutritionally healthy diet that would help us meet the necessary 25% GHG emission reduction by 2020, as required under the Climate Change Act.

It looks at the way people in the UK eat at the moment, compares this to existing nutritional requirements (the UK government's Eatwell plate) and posits the Livewell 2020 plate – a sustainable version. To help illustrate this in a way people can easily understand we've developed an example of a weekly shopping list and menu (based on the nutritional requirements of an adult woman).

The report gives a picture of a way of eating that is good for the planet and good for your health too. And for some it might even be cheaper. It's no radical proposal – it's a diet that contains meat or

fish every day including everything from chicken curry to macaroni cheese.

When it comes to food everyone is a bit weary of being told what to do. It all sounds a bit complicated – cholesterol, saturated fat, organic, food miles, seasonal… The good news is it doesn't have to be that complicated. What's healthy for people is – more or less – healthy for the planet too.

When it comes to what we eat the first thing we all need to do is eat more fruit and veg and less meat and highly processed food. In the UK there are five Livewell principles, which will be revisited and tailored for each pilot country and the LiveWell for LIFE project as a whole:

1) Eat more plants – enjoy fruit and veg

One of the key things we can do is eat more plants – fruit, vegetables, beans, nuts, grains as part of our diets.

How much fruit should you eat a day?

Two to three pieces of fruit is plenty, the rest of your five or more a day should be made up of vegetables and others plants. The reason is fruit, while being an excellent source of nutrients also contains a lot of sugar, something that in excessive quantities is bad for us. By eating two portions of fruit a day we are enjoying the benefits without the impacts.

In some countries and for some people the five a day message has been interpreted as eat five or more portions of fruit, and very few vegetables. This would result in excessive sugar consumption and it would be hard, if not impossible, to get the other nutrients found in a wide variety of different coloured vegetables.

2) Waste less food. 33% of food is lost or wasted

3) Eat less meat. Meat, be it red or white, can be a tasty complement rather than the centre piece of a good meal

4) Eat less processed food. Processed food tends to be more resource intensive to produce and often contain high levels of sugar, fat and salt.

Many types of food are classified as processed. It is almost impossible to avoid processed food, from a loaf of bread to packet of peanuts. Most people in Europe get over half their food from processed sources. We fully recognise the key role processed food plays in our diet and we would never say: eat no processed food. It is just from a Livewell point of view it would be better to eat more whole food and to cook more food from scratch, at least some of the time. This will always be a better option from an environmental point of view and it has the advantage of bringing people together and learning new skills.

Some processed food contains empty calories that can encourage people to eat more while not achieving a significant nutritional benefit.

But doesn't processed food use less energy to cook?

This can be true. Cooking lots of dishes on mass in an industrial oven does use less energy than cooking at home. We need to remember the majority of a foods footprint happens on farm, well before it gets to a processor or to our kitchens. If we really wanted to reduce the footprint of food we would eat different

products. A lot of processed ‘ready meals’ come it lots of packaging which not only take energy to produce and make, but need to be disposed of and are made up of natural resources, often plastics. If we cook from scratch at home we avoid this.

Processed foods in moderation are fine; we just need to eat a little less and avoid eating too many high in fat, or salt or sugar or all three.

5) Eat certified food. Buy, whenever possible, food that meets a credible certified standard – like MSC for fish or Fairtrade.