# SUSTAINABLE FOOD "Treat the earth well. It was not given to you by your parents. It was loaned to you by your children." Kenyan Proverb

#### **SUSTAINABLE FOOD**

A Guide for Early Years

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Eating Well for 1-4 year olds. Practical Guide and Food Photos
Eating Well: First Year of Life. Practical Guide and Food Photos

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#### Key terms for sustainable food

#### **Food chain**

the system that describes how food gets from a natural state (for example in the ground) to the plate

#### **Environmental damage**

destruction of naturally occurring plant and animal ecosystems

#### Intensive farming

food production that relies heavily on high inputs of technologies and chemicals to produce a large scale output

#### **Greenhouse Gas Emissions**

gases from fuel combustion, industrial processes, agriculture, land use change and waste including carbon dioxide, methane and nitrous oxide which contribute to global warming

#### Local food

food that is grown, processed, packaged and sold locally. Local is often used to describe food which is produced, traded and sold within a defined geographic radius, often about 30 miles.

#### Seasonal food

food that is naturally abundant in certain seasons

#### Organic

food produced using organic farming methods without the use of pesticides or routine antibiotics, and processed without the addition of non-organic ingredients or artificial additives

#### Sustainable

meets the needs of the present without compromising the ability of future generations to meet their own needs

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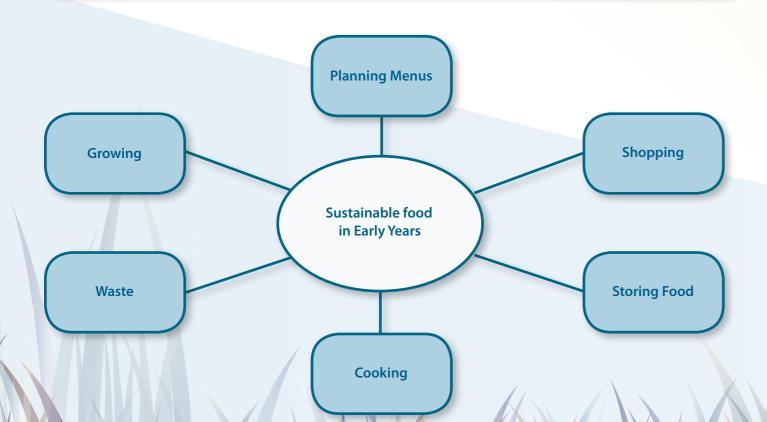
A Guide for Early Years settings

## Introduction

Providing more sustainable food in Early Years settings is an important aspect of providing better food for all. The food that children eat in Early Years settings not only has an impact on the health of the child eating it, but also on the health of the planet. Sustainable food is about food culture and how decisions made about growing, buying, storing, cooking and wasting food today will impact future generations. By providing sustainable food your Early Years setting can make a positive contribution to the following areas:

- Society
- Economy
- Environment

Introducing sustainable food to Early Years settings is an opportunity to connect children and families to more environmentally friendly habits and to nurture a sustainable food culture. The information presented here provides a guide for Early Years settings to enable them to adapt current food provision into more sustainable systems of providing healthy food to young children. The idea is to help different types of Early Years settings make progress towards offering sustainable food. How different settings buy, cook, store, grow, waste and plan the food they serve will be very variable, but we hope that everyone will be able to reflect on their current practice and find some areas where they can make change. The diagram below indicates the areas where sustainable food can be addressed, and where we can all start to make a difference.



# How to use this guide

The guide is made up of 5 information sheets on key areas of sustainable food and a simple planning tool. Each information sheet has a table that outlines key principles that can be addressed to increase sustainable food in Early Years settings. In each table there are two columns that are designed to help you assess the current state of sustainable food in your setting and to plan for more sustainable practices.

A theme that runs throughout each information sheet is 'supporting children and families to take messages of sustainability home'. A core value of sustainability is encouraging everyone to get involved with creating positive impacts on society, the economy and the environment. Each information sheet contains recommendations that encourage this and throughout there are examples of how other settings have put some of these ideas into practice.

At the end of the guide there is a sustainable food audit tool to help you work out how to improve the sustainability of food in your Early Years setting, and a list of resources that offers lots more ideas and information.

'We are living on this planet as if we had another one to go'

Teri Swearingham

## Planning Menus

Planning menus is where sustainable food for early years begins. Planning menus with sustainability in mind will provide a strong foundation from which other sustainable food actions can develop.

#### Example:

Childsplay Nursery in Newcastle involved parents in developing a food policy for the entire nursery. The food policy involved using organic food where possible.

"We serve a varied diet with meat, fish, potatoes, rice, pasta, dairy products and lots of fresh fruit and vegetables, and we use organic food where possible, but our approach goes deeper than that. Mealtimes are seen as an educational and social experience, and we get the kids involved peeling the fruit or setting the table, as well as talking about the food and their sensory experience of it."

(The Soil Association, Better Nursery Food Now)

	Principle	Impact	Action	Do we currently do this?	Could we do this? What would help?
	Use less processed foods (for example, ready made cakes and cake mixes, biscuits, puddings, savoury dishes, canned meat and cereal products, ready made sauces)	Processed foods take a lot of energy to produce and require a lot of packaging. It is also hard to trace ingredient source (country of origin) in processed foods compared to unprocessed	Increase the amount of food that is cooked from fresh ingredients		
	Buy foods which have been packaged and processed as locally as possible	Local foods do not have to travel long distances and there is less environmental impact from the fuel used in transport	Purchase food from local suppliers such as box scheme providers, local market stalls, local farmers markets or local shops which offer food that is locally grown		
anning Menus	Buy seasonal produce where possible	Food that is eaten in season does not need to be grown using artificial heat or kept cool in cold storage, which also takes energy	Keep a seasonal food calendar in the kitchen and plan menus to use different foods throughout the year, grow food in your garden or make links with a local community garden or allotment		
Plannin	Where possible plan to include organic food in menus	Organic food is pesticide free and therefore less intensive to farm and has less impact on the environment	Find out if local box schemes and markets provide cost effective organic food that can be included in menus		
	Ensure the types of fish included on the menu are sustainable	Many types of fish are currently being over fished and the continued consumption of these varieties means that some fish varieties may be fished to extinction	Use fish that are recommended as sustainable choices by the Marine Stewardship Council (see resources)		
	Eat less meat and meat products	Livestock production is the most damaging area of farming for the environment and cutting down on total meat intake will help to reduce climate damage.  Animals that are fed on grassland damage the environment less than those that are fed animal feed	Aim to buy good quality British/local meat to use in menus from grass fed livestock where possible. Have a meat free day each week and use alternative sources of protein such as eggs, pulses (peas, beans and lentils), ground nuts, or soya and other meat alternative products		

# Shopping for food

Knowing both how to recognise sustainable food, and where to buy sustainable food, is an essential skill for shopping for sustainable menus. If you buy food from a wholesale supplier talk to them about where they source their food and request more sustainable foods where possible. Many local food producers now also run box schemes and can often deliver food and some can be contacted through farmers markets.

### Supporting children and families to take messages of sustainable food shopping home

- Publicise through newsletters, signs, websites where food is bought from and why your EY setting has chosen to buy food from sustainable sources
- Organise trips to local food producers for the children you look after and encourage parents to come along
- Integrate aspects of sustainable food shopping into activities and play
- If you have strong links with local producers, see if they would be interested in supplying a food co-op or box scheme for parents

Sustainable food principle in action: Fruit and vegetable box scheme

The Community Fruit and Veg project in Hastings is a social enterprise set up as part of the Five a Day programme based at Hastings and Rother Primary Care Trust. It is run on a not-for-profit basis and is supported by externa funding, although it aims to be self-sustaining in the future. It currently supplies three nurseries with either fruit boxes or veg boxes, weekly or twice weekly. It is flexible in terms of what it delivers and when - nurseries can have a £10 box of fruit twice a week, or a £15 box once a week, depending on their needs. A mixed fruit and vegetable box is also available. They also deliver organic bread from the local Judges Organic Bakery.

The Community Fruit and Veg project sources as much produce as they can locally, which they admit is sometimes a struggle for fruit. They do use imported bananas and oranges, and are exploring buying Sicilian oranges via a partnership with a local farmer in the region. The nurseries felt they could not afford exclusively organic produce. However the boxes usually contain at least one organic item

From: *Georgie Porgie Pudding and Pie – Exposing the truth about nursery food.* Soil Association (2008)

	Principle	Impact	Action	Do we currently do this?	Could we do this? What would help?
	Looking out for Best before labels	Buying certain foods such as dairy products too close to the date they expire can result in wasted food	Where possible buy foods that you can be sure to use before they spoil		
a for food	Local shopping helps local economies  Bulk buying	Buying food from local sources and producers reduces the environmental impact of food travelling long distances  Buying local food supports your local economy and community	Where possible purchase ingredients from local sources – it will support the local economy and may even work out cheaper		
Shoppin	Bulk buying	Bulk buying of sustainable foods enables cheaper prices	It might be possible for your Early Years setting to be part of a food co-op or buying group. Food co-ops and buying groups enable groups of people to pool their buying power and purchase food from local sources		
	Reduce packaging	Packaging is often intensive to produce, creates waste and uses unnecessary amounts of energy	Buy food from sources that use minimal packaging or no packaging		
	Buy sustainable fish	Buying fish from sustainable stocks will allow fish stocks of some varieties to recover	Buy fish that is Marine Stewardship Council approved		

# Waste and storing food

Not storing food properly leads to wasted food and wasted food is wasted energy that negatively impacts the environment

"It is estimated that 20% of the UK's greenhouse gas emissions are associated with food production, distribution and storage. If we stopped wasting food that could have been eaten we could prevent at least 20 million tonnes of carbon dioxide equivalent emissions each year" WRAP (2010)

#### Supporting children and families to take messages of storing food and waste home:

Make children and parents aware of the simple things they can do to have a positive impact on sustainable food

- Display information on sustainable food storage
- Encourage recycling and composting principles through activities with children
- Emphasise the potential financial savings of sustainable energy practices

#### Sustainable principle in action: Recycling activity

There are now a number of schemes that actively encourage Early Years settings to get involved with recycling through fun activities. The following activity is from the Ecoschools scheme which also has an Early Years programme:

Activity Tip – Waste Garden - Choose a range of organic and non-organic waste. Organic waste is anything that was once living and will break down at a fast rate. Non-organic are man made materials such as tin cans and plastics and these may not break down in our lifetime. Ask the children to place the items in a designated area of the centre grounds and observe over time. Discuss with the children the reason why some types of litter disappear much quicker than others. This will emphasise the importance to not litter. If the centre does not have adequate grounds for a waste garden, the exercise can be completed indoors. Ask the children to draw a picture of the chosen items and stick the images to each item. Fill a plastic transparent container with soil and make sure that this is kept moist. It is important that the soil does not dry out. Place the items inside the container and ask the children to observe this over a four week period. Discuss with the children why some of the items have decomposed quicker than others.

	Principle	Impact	Action	Do we currently do this?	Could we do this? What would help?
	Reduce the amount of food waste	Food that is purchased and not eaten or produced and cooked but not eaten causes waste	Ensure that portion sizes are appropriate both for the children you look after as well as others that may eat with the children in your setting		
			Do a waste audit and work out what food gets thrown away and why, and change your shopping habits to reduce this		
d food	Recycling food waste	Recycled food waste provides compost and nutrient rich soil to grow food from. Wasted food in landfill sites creates gases which contribute to climate change	Recycle food waste through composting on site or by joining a local council food waste service		
aste and storing foo	Packaging and recycling	It takes energy to make packaging and much of this is thrown away and causes waste and landfill	Buy food from sources that use minimal packaging or no packaging  Buy food in containers that can be recycled where packaged food is bought		
ste and	Be aware of the lifespan of the food you buy	Lots of food is wasted through people not being aware of expiry dates	Be aware of the expiry dates on food to prevent unnecessary waste and check stored goods regularly		
Was	Freezers	It can be useful to freeze food in season for later use, or as a method of keeping excess food that might otherwise be wasted, safely. Frozen food does however take a lot more energy to store than non- frozen foods. And some frozen foods travel longer distances and therefore have a larger environmental foot print than non –frozen foods.	Follow instructions for freezers so that they work most efficiently. Don't overstock freezers with food and think about whether or not frozen foods are the best option  Make sure when buying frozen foods you use the same sustainable principles as when buying fresh food		
	Fridge temperatures	foods  Having the fridge set at either too warm or too cold a temperature can waste energy and spoil food	Keep fridge at a cool 0-5 degrees and chilled food will stay fresher longer. Use a fridge thermometer to make sure your fridge is at the right temperature		
	Energy	When cooking food, it is easy to waste energy	Follow the sustainable cooking guidelines		

Action

Do we

Could we do this?

Principle

Impact

# Cooking and serving food

How and where food is cooked can make an impact on the overall sustainability of the food on your sustainable menus as well as potentially save some money from energy bills.

#### Supporting children and families to take messages of cooking home:

- Talk to children about the food they're eating and how it has been cooked
- Create opportunities for children to be involved with an aspect of preparing food and link to other activities such as gardening, crafts and stories
- Emphasise to parents both the environmental and financial savings that could be made from more sustainable cooking practices
- Promote the recipes from your sustainable menu to parents
- Children can learn a lot through play. Role play kitchens are an exciting
  way to engage children with the principles of sustainable food and
  cooking. They provide a relevant environment for talking about issues
  such as not wasting food, introducing the idea of energy use in cooking

#### Principle in action: Promoting sustainable menus to parents

Tall Trees Kindergarten in Somerset publishes their menus online highlighting products that are local, organic, fresh and homemade. Below are some examples of lunches that are served at Tall Trees:

Local free range pork sausages with homemade organic baked beans, and a 3 root vegetable mash and organic custard with banana for pudding.

Organic butterbean and vegetable mild curry with crushed potatoes and seasonal fresh vegetables with homemade super berry and banana smoothie.

On the menu Tall Trees highlight the fact that each meal is prepared daily, from scratch and in the Tall Trees kitchen. This promotes sustainable practices and encourages parents to be more engaged with sustainable food.

	Principle	impact	Action	currently do this?	What would help?
	Cooking from fresh ingredients requires cooking skills	Having the skills to cook fresh produce enables you to reduce the amount of processed food and packaged food and produce healthier and more sustainable foods	Ensuring person/ people responsible for cooking have adequate skills		
servina food	Reduce the amount of heat energy used in cooking	Cooking uses a lot of heat energy. Cooking in an oven uses the most heat energy	Think about how food is cooked e.g. Use a microwave oven to reduce cooking times, use the top of the stove rather than the oven, steam food over boiling liquid		
Sooking and s	Reduce energy use in the	Simple actions such as boiling a full kettle or opening an oven door means that energy is wasted	Do not use more water than is needed when boling a kettle or pan Food cut into smaller pieces takes less time to cook and therefore uses less energy		
	Know how much energy you use in cooking	When we are aware of how much energy we use cooking we can often see ways to reduce our consumption	Install a meter which shows how much energy you use and monitor how much is used when cooking in different ways		

## Growing

## food

Growing any amount of food in an Early Years setting is a great way to engage children and parents with the concept of sustainable food while also potentially saving some money.

#### Supporting children and families to take messages of food growing home:

- Include parents in their child's experience of learning about food and where it comes from by encouraging parents to come on trips to farms, urban farms etc
- Do growing activities with children that they can continue at home with the support of their families and parents
- Create new growing spaces at your Early Years setting. Even if outdoor space is limited food can be grown in tubs and planters and on window sills
- Plan a vegetable garden or window box of herbs with children
- Sprout seeds indoors and grow mustard and cress

Sustainable food principle in action: Growing food Northlands Park Nursery

Having a vegetable garden and growing vegetables helps the many flat-dwelling under-5s at the Pre-School Learning Alliance-run nursery in Northlands Park Children's Centre in Basildon, Essex, appreciate where food comes from.

After a tea of vegetable soup, when they're collected by their parents at the end of the day the children will have had at least three of the five-aday portions of fruit and veg.

"They eat veg here they won't try at home, and if they see fruit being cut up they will try anything."

	Principle	Impact	Action	Do we currently do this?	Could we do this? What would help?
	Growing food can provide organic food for menus you design	Provide some sustain- able food for your Early Years setting	Grow fruits, vegetables or herbs in tubs, window boxes or in the garden of your setting		
Growing fooc	Growing food is an important educational experience	Learning where food comes from and how it grows at an early age can lead to more sustainable food practices throughout a child's life	Include gardening and food growing into activities for children in Early Years settings to participate in		
	Visiting farms, gardens or farmers markets	Helps children under- stand where food comes from and that food is part of a food chain	Develop activities around a visit to a farm, urban farm or garden where food is grown.  Visit a market and see a variety of locally grown food		

# Sustainable Food Planning Tool

After reading this guide and filling in the last two columns in each table on every information sheet, use that information to start thinking about ways that you could nurture a sustainable food culture within your Early Years setting. Use your answers as a basis to develop a sustainable food policy.

	Existing sustainable practices	Changes we can make immediately	Changes we can plan to make in the future	Overall goal
Menu planning				
Shopping				
Waste and storing food				
Cooking				
Growing				

# Useful links and resources

The following resources and websites provide information on aspects of sustainable food that will help you develop plans for more sustainable food provision in your Early Years setting.

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Sustain (2007)

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Which? (2010)

Making Sustainable Food Choices Easier

[online] http://www.which.co.uk/documents/pdf/making-sustainable-food-choices-easier-231317. pdf Which, London

WRAP (2010)

Date labels and storage guidance [online] http://www.wrap.org.uk/retail/food\_waste/date\_labels\_and.html

The Soil Association's Food for Life Catering Mark offers recognition for day nurseries and early years food providers serving fresh, sustainable and healthy food. The bronze, silver and gold awards help demonstrate commitment to sustainable and healthy food for children. The awards also act as an independent guarantee for parents and Ofsted that the new national voluntary food and drink guidelines for early years settings in England are being met.

Find out more about the Catering Mark at http://www.sacert.org/cateringmark

Food co-ops and box schemes	www.sustainweb.org/foodcoops www.soilassociation.org
Organic food	www.organicfood.co.uk www.food.gov.uk/foodindustry/farmingfood/organicfood www.gardenorganic.org.uk.
Local food	www.makinglocalfoodwork.co.uk www.localfood.org.uk www.bigbarn.co.uk
Seasonal food	www.defra.gov.uk/2010/09/24/eat-seasonably
Seasonable Food Charts	www.schoolfoodtrust.org.uk/schools/resources/british-seasonal-food-chart
Meat	www.fao.org/newsroom/en/news/2006/1000448/index.html
Waste and recycling	www.recyclenow.com www.lovefoodhatewaste.co.uk www.wrap.org.uk
Storing food	www.lovefoodhatewaste.com/storage_and_tools/tips/keep_your_cool
Cooking	www.care2.com/greenliving/save-kitchen-energy-10-cooking-tips.html# www.uk-energy-saving.com/green-cooking.html
Growing	www.lotc.org.uk www.ltl.org.uk www.bbc.co.uk/gardening/digin www.gardenorganic.org.uk
Energy efficiency	www.energysavingtrust.org.uk www.greenchoices.org/index.php/greenchoices/the-home/kitchen-appliances
Fish	www.mcsuk.org/what_we_do/Fishing for our future/Fishonline/Fishonline www.fishonline.org
Food labels	www.onpackrecyclinglabel.org.uk www.eatwell.gov.uk/foodlabels/labellingterms www.leafuk.org/leaf/organisation
Early years programmes and schemes	http://www.eco-schools.org.uk/early-years http://www.sacert.org/Gettingcertified/Whatwedo/tabid/1055/language/en-US/Default.aspx www.growingschools.org.uk/EarlyYears/All%20about%20food.pdf
General resources	www.sustainablefoodservice.com/res/tools.htm www.sustainweb.org/