



# Lesson 2: Healthy and Sustainable Food

## MAIN MESSAGES

What food is good for us and good for the planet?

- How to eat healthily and sustainably
- Eating more fruit and vegetables is good for us and good for the environment
- Eating less meat is good for the environment
- Each child makes a healthy eating pledge

## RESOURCES

Provided as part of this pack:

1. Prezi presentation link
2. Food waste audit PowerPoint
3. Good for You Good for the Planet trolley game (board and card sets x 15)

For smoothies you will need:

- Fruit and vegetables for smoothies
- Smoothie maker or hand blender
- Extension lead (if required)
- Water
- Jugs, 6 spoons
- 30+ cups (compostable if possible)
- Compostable bin bag
- Cloth & tissues

## PREZI PRESENTATION LINK

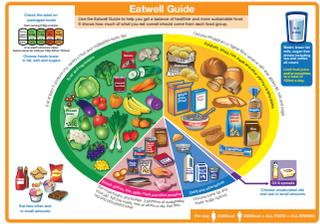
Prezi link: [https://prezi.com/ihack1\\_wryil/yes-to-taste-no-to-waste/](https://prezi.com/ihack1_wryil/yes-to-taste-no-to-waste/)

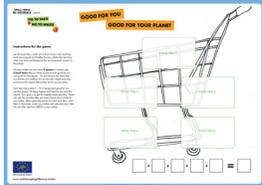
**WORKSHOP LENGTH: 1.5 hours**

## CURRICULUM LINKS

- **Science:** working scientifically; measuring and recording data; reporting and presenting findings, including causal relationships and explanations of results; nutrition and healthy eating (the importance of an adequate and varied diet for health); **Sc2, living things in their environment:** ways in which the environment needs protection.
- **Literacy: En1.** speaking and listening; group discussion and interaction.
- **Numeracy:** measuring; statistics; tables (Carroll diagrams; bar charts); converting measures; fractions, decimals and percentages.
- **Geography:** knowledge and understanding of environmental change and sustainable development; recognise how people can improve the environment or damage it, and how decisions about the environment affect the future quality of people's lives.
- **PSHE:** learn about the wider world and the interdependence of communities within it; develop a sense of social justice and moral responsibility and begin to understand that their own choices and behaviour can affect local, national or global issues.
- **Design & Technology:** cooking; nutrition and healthy eating; understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.



Time	Main Learning Points	Activity	Resources
<b>10 minutes</b>	<p>Know whether food wasted is increasing or decreasing across different year groups.</p>	<p>&gt; If taking part in food measuring, start the session by sharing and comparing findings from Week 1 and 2 lunch time plate waste weighing.            &gt; Record on food audit sheet. Calculate the percentage of food waste per year group and record on PowerPoint bar chart.</p>	<p><u>In this pack:</u></p> <p>- Food audit (PowerPoint)</p>
<b>20 minutes</b>	<p>Recognise the Eatwell plate, and that fruit and vegetables should form 1/3 of our food to give us enough fibre and vitamins to keep our bodies healthy.</p> <p>Emphasise that fruit and veg are fat free and fat is a food group we only need a small amount of.</p> <p>Emphasise the vitamins and nutrients needed for a healthy balanced diet in each of the food groups displayed.</p> <p>Know that the production of fruit and vegetables are less resource intensive on the environment.</p> <p>Know that eating fruit and vegetables is good for the environment and also good for us.</p>	<p>&gt; <u>Eat Well Plate</u>            Show Eatwell plate on Prezi slide</p>  <p>&gt; <u>Ask pupils questions:</u></p> <ol style="list-style-type: none"> <li>1. How many pieces of fruit and veg per day should we all be eating? (answer = 5 or more)</li> <li>2. What fraction of the plate does this represent? (1/3 a third)</li> <li>3. What is a portion size? (One portion = 80 grams; a handful of grapes; half an orange; an apple; two broccoli spears)</li> </ol> <p>&gt; <u>Show video</u> to introduce the environmental impact of food, and that it can happen at different points along the food chain: 'What's the problem with wasting food?'  <a href="https://www.youtube.com/watch?v=ioCzxxqgLf0">https://www.youtube.com/watch?v=ioCzxxqgLf0</a>            (You may want to pause the video half way at 1:45 seconds to discuss.)</p> <p>&gt; <u>Ask two key questions:</u></p> <ol style="list-style-type: none"> <li>1. What are we wasting if we throw food away?</li> <li>2. How is energy used in food production?</li> </ol> <p>OR</p> <p>how is water used in food production?</p> <p>&gt; <u>Ask pupils to come and write on board what's wasted</u> i.e. land, water, energy, animal feed, etc.</p>	<p><u>In this pack:</u></p> <p>- Prezi presentation  <a href="https://prezi.com/ihack1_wryil/yes-to-taste-no-to-waste/">https://prezi.com/ihack1_wryil/yes-to-taste-no-to-waste/</a></p>

Time	Main Learning Points	Activity	Resources
<p><b>25 minutes</b> (15 minutes playing game &amp; 10 minutes calculating &amp; discussing results)</p>	<ul style="list-style-type: none"> <li>You can choose food that's good for you and good for the planet</li> <li>Fruit and veg is good for you because of vitamins and minerals</li> <li>Fruit and veg is good for the planet because it uses less water and land use</li> <li>Meat isn't great for the environment because of methane and land use (however, we can still eat meat, but we can try making our meat go further using beans, or sticking to the Eatwell plate thirds).</li> </ul>	<p><b>'Good for you, Good for the planet' Game</b></p> <p>&gt; Print 15 copies of the game for pupils to use in the classroom (board and cards). Explain instructions on how to play the game. At their tables, in groups of 2-3, pupils play the game.</p> <p>&gt; Reveal points for each food on Prezi slide. Pupils calculate results at end &amp; discuss.</p>   	<p><u>In this pack:</u></p> <ul style="list-style-type: none"> <li>- 15 copies of game</li> <li>- Display &amp; model game on Prezi slide / PowerPoint</li> <li>- Game result points on PowerPoint</li> </ul>
<p><b>25 minutes</b></p>	<p>Smoothie making</p> <p>Experiential learning, applying knowledge by doing.</p> <p>Challenge - can you make a healthy and sustainable smoothie using only fruit and veg?          Highlight – using frozen fruit is healthy and uses leftovers.          Highlight - tinned is as healthy as fresh and lasts longer.          Example – half eaten apple can be chopped and frozen.          Highlight where the food has come from – sourced by looking at food labels.</p>	<p>Lay out smoothie ingredients.          Make smoothie with class in groups, encouraging each group to choose their own ingredients, using surplus fruit, e.g.</p> <ul style="list-style-type: none"> <li>fruit left over from school healthy snacks</li> <li>frozen fruit/veg</li> <li>wonky fruit/veg</li> <li>tinned fruit in own juice (sugar juices are not healthy)</li> </ul> <p>Make signs to ensure pupils understand where fruit/veg has come from and that it would have gone to landfill, but can make healthy delicious smoothies instead.</p> <p><i>NB: Any non-edible food waste to be recycled in a food waste caddy. Check allergies for fruit or veg.</i></p>	<p><u>You will need:</u></p> <ul style="list-style-type: none"> <li>Fruit &amp; vegetables (at least 6 types)</li> <li>smoothie maker</li> <li>extension lead (if needed)</li> <li>Jug, 6 spoons</li> <li>30+ cups for tasting</li> <li>Compost bags/ food waste caddy for non-edible food waste</li> <li>Cloth &amp; tissues</li> </ul>
<p><b>10 minutes</b></p>	<p>Opportunity to apply knowledge, and take action on new knowledge.</p>	<p>&gt; Eln their home-school book, each child makes a pledge to eat healthily and sustainably, using the knowledge gained from 'check your trolley'.          Plenary          Review main learning points if needed.</p>	<p><u>In this pack:</u></p> <ul style="list-style-type: none"> <li>- Prezi</li> <li>- Home-school books</li> </ul>
	<p>To ensure action is rewarded.</p>	<p>&gt; <u>Follow Up Next Lesson:</u>          Ensure pledges are checked and pupils are rewarded (with stickers or your usual reward).</p>	<ul style="list-style-type: none"> <li>- Stickers or reward options</li> </ul>

## FOR NEXT LESSON

Consider which campaign option is appropriate for your school.

### 1. HEALTHY EATING (Making smoothies)

Smoothie making at the school gates - supplying smoothies and (optional) fruit kebabs; smoothie recipes using surplus fruit and veg.

### 2. REDUCING FOOD WASTE (Leftovers recipe book)

Love Your Leftovers - parents pledge to use one left over item, send in their recipes and create a recipe book. Parents and pupils make leftovers dishes to taste at food fair.

### 3. RECYCLING FOOD WASTE (Food waste caddies)

Food Waste Funfair - Encourage use of and offer free food waste caddies and play exciting interactive games to learn about food waste recycling, e.g. to caddy or not to caddy.

*NB – check allergies for fruit or veg.*

YES TO TASTE

NO TO WASTE



GOOD FOR YOU

GOOD FOR YOUR PLANET

### Instructions for the game

Lay the food items cards out in front of you and read how each one is good and healthy for you, whilst also learning what may have contributed to the environmental impact on the planet.

On your trolley mat you have **5 spaces** to choose only **5 food items** that you think would be both good for you and good for the planet. Try and choose the items that you believe are healthier for you but also might have less environmental impact before they arrive on your plate.

Each item has points 1 – 10 (1 being least good for you and the planet, 10 being highest and best for you and the planet). Your goal is to get the highest points possible. Points will only be revealed after you have chosen the 5 foods for your trolley. When given the points for each food item, write them in the boxes under your trolley and calculate your total. You can then see how GREEN is your trolley!



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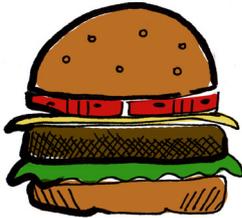
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# Good For You, Good For The Planet Food Items



## Beef



### Good for you?

Protein, minerals & vitamins; saturated fat.

### Good for your planet?

Methane & high CO<sub>2</sub> emissions from growing cattle feed, processing, transport & storage.

70% of Amazon deforestation is to clear land to graze beef cattle.

## Frozen chips



### Good for you?

Rich in carbohydrates & fibre; vitamins & minerals; saturated fats & added salt.

### Good for your planet?

Uses 500 litres of water to grow per kilo of potatoes; factory production, transport & cold storage = CO<sub>2</sub> emissions.

## Broccoli



### Good for you?

1 of your 5 a day; fibre, vitamins & minerals.

### Good for your planet?

Fruit and veg use less water and energy than most other foods.

## Tomatoes (tinned)



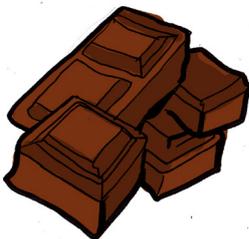
### Good for you?

1 of your 5 a day; vitamins & minerals; fibre; riper when tinned.

### Good for your planet?

Small amount of CO<sub>2</sub> emissions in production, tin can production & transport.

## Chocolate



### Good for you?

Contains anti-oxidants; high in sugar & saturated fat. (Dark chocolate is better for you)

### Good for your planet?

High CO<sub>2</sub> emissions in land clearance, farming, processing & transport.

## Apple



### Good for you?

1 of your 5 a day; vitamins, minerals, fibre & natural sugars.

### Good for your planet?

Fruit and veg use less water and energy than most other foods.

## Rice



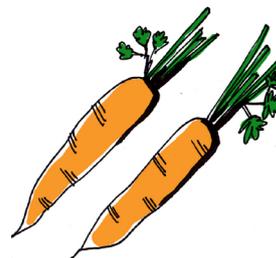
### Good for you?

Carbohydrates; vitamins & minerals & fibre. (brown rice is better for you)

### Good for your planet?

Medium CO<sub>2</sub> emissions in transport & storage.

## Carrots



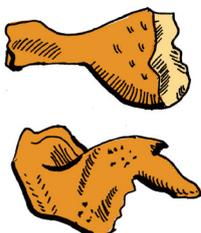
### Good for you?

1 of your 5 a day; vitamins, minerals & fibre.

### Good for your planet?

Fruit and veg use less water and energy than most other foods.

## Chicken



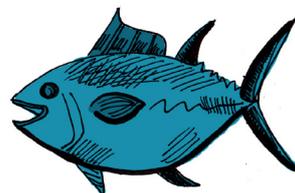
### Good for you?

Protein; vitamins & minerals; saturated fat.

### Good for your planet?

Medium CO<sub>2</sub> emissions in growth, processing, transport & storage.

## Tinned tuna



### Good for you?

Protein, Omega 3 oils, vitamins & minerals. (better in water than oil)

### Good for your planet?

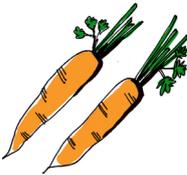
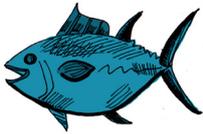
Medium CO<sub>2</sub> emissions in production, tin can production & transport.



## Good For You, Good For The Planet

### Food Item Points

Answer sheet for teachers. Reveal these points once the pupils have chosen their cards.  
Pupils then fill in their points and add them up.

<b>Apple</b> 	<b>10</b>	<b>Carrots</b> 	<b>9</b>
<b>Broccoli</b> 	<b>8</b>	<b>Rice</b> 	<b>7</b>
<b>Tomatoes (tinned)</b> 	<b>6</b>	<b>Frozen chips</b> 	<b>5</b>
<b>Tuna (tinned)</b> 	<b>4</b>	<b>Chicken</b> 	<b>3</b>
<b>Chocolate</b> 	<b>2</b>	<b>Beef</b> 	<b>1</b>