

A stylized graphic of a tree trunk and branches on the left side of the page. The trunk is black with green outlines, and the branches are solid green.

102 - Climate Change Challenge WebQuests

Sustainable Plate



**Building Problem-solving Skills of Youth to Address
Environmental and Climate Change Issues**

IO2 – Climate Change Challenge WebQuests

WebQuest Theme: Sustainable Plate

TIME ALLOCATED:	1 week
TITLE OF THE WEBQUEST:	Sustainable Plate: 3-Course Irish Menu
INTRODUCTION	
<p>The world's food system is responsible for about one-quarter of greenhouse gases that humans generate each year (The New York Times, 2019). By 2050 the world's population will have grown more than 30%, it will reach 9.1 billion people and 70% more food will have to be produced (FAO, 2019). One of the most effective ways to feed a growing world population without destroying the planet is through a sustainable and healthy diet. A change in the model towards this type of diet would drastically reduce the amount of greenhouse gases that are released into the atmosphere. The objective of sustainable diets is to address the growing environmental and health concerns related to the production and consumption of food. Food production processes are far from sustainable and the current model of agriculture contributes greatly to pollution, greenhouse gas emissions, land degradation and a loss of biodiversity. In a sustainable diet, it is essential that food production is culturally coherent, and the goal is for consumption to have a minimal environmental impact.</p> <p>The main challenge of the 21st century is the consumption of local products. We must bear in mind that most of what we eat has been produced thousands of kilometres away. This is calculated through 'food miles' which can emit a surplus of carbon emissions. Given the limitation of water and land resources, eating more sustainably, not only contributes to food security for the expected growth of the population, but also ensures the care of our planet. We can take many steps to eat more sustainably and encourage others to do so too! By changing our consumption habits, we can all have a positive impact on the environment. Choosing seasonal foods has a lower environmental impact on its production. By consuming a product out of season – for example, a watermelon in cold months – it is possible, its carbon footprint is much higher. You can also make sure to support the sustainable use of resources locally. Looking into how producers protect and improve rural livelihoods, equity, and social well-being can also measure how sustainable the food you are consuming truly is. Eating sustainably helps to strengthen the resilience of people, communities, and ecosystems.</p>	



TASK

You have read about the importance of sustainable eating and you think it would be beneficial to raise awareness about the importance of everyone consuming 'sustainable plates.' You want to promote how making small changes such as buying seasonal produce, purchasing local foods, lowering the consumption of processed-foods and other actions can have a positive impact on the environment. You decide that you are going to research about sustainable eating and display your findings on an infographic, entitled "A Sustainable Irish Plate" in your youth centre. You hope that by catching the eye of others with your visual display, you can encourage others to make wise decisions, and eat more sustainably. But you cannot do it on your own!

You want to work as a team with your peers to understand how implementing eco-friendly measures towards your consumption habits can lower your greenhouse gas emissions and carbon footprints. You want to research how people can make changes within their own lifestyles, what change will come from this, and other tips and tricks to encourage people to produce sustainable meals.

You will complete the tasks in a small group, with just 2 or 3 of your peers. When you complete this task, you will present your infographic to your local youth centre. You hope that this will encourage not only your peers and your youth workers, but also the community at large, to reduce the impact of global warming and sustain our planet's natural resources. This process will encourage your community to discover different ways that they can buy, prepare, and consume foods that have minimal effect on the environment.

PROCESS

Step 1: Explore to its core

To get started on developing your infographic, you will first need to research about sustainable eating, its impact and different types of sustainable meals that you could encourage others to prepare. By doing this, you will ensure that your infographic explores and displays factual information that will encourage others to take eco-friendly measures and eat more sustainably.

For more information about sustainable eating, click on the following links:



- Tips to eat sustainably: <https://www.wwf.org.uk/updates/six-tips-help-you-eat-more-sustainably>
- Sustainable diets: https://www.panda.org/our_work/our_focus/food_practice/sustainable_diets/
- How to eat sustainably: <https://sustainablefoodtrust.org/key-issues/sustainable-healthy-diets/how-to-eat-sustainably/>
- Healthy and sustainable diets: <https://www.eufic.org/en/food-production/article/practical-tips-for-a-healthy-and-sustainable-diet>

For more information on the importance of eating a sustainable diet, click on the links below:

- Importance of sustainable diets: <https://www.danone.com/stories/articles-list/importance-sustainable-diet.html>
- Why is food sustainability important? <https://www.childrensnutrition.co.uk/full-blog/food-sustainability>
- Climate change food calculator: <https://www.bbc.com/news/science-environment-46459714>
- Climate change food eating habits: <https://www.nytimes.com/interactive/2019/04/30/dining/climate-change-food-eating-habits.html>

Step 2: The Fundamentals of Sustainability

You know that it is important to consume food responsibly, ethically and in an environmentally-kind way, but now you think it will be important to focus on the impact of food waste on the environment. Food waste, like all waste, takes vital natural resources from the planet and wastes them. Cutting down on food waste could also reduce carbon emissions and ensure the food security for communities around the world.

It could also be beneficial to explore green initiatives that look to promote food sustainability. In recent years in Ireland the Farm-to-Fork movement has really gotten some traction, as people want to be able to trace where their food comes from. These focus areas could be aspects that you could highlight through your infographic.

For more information on food wastage in Ireland, click on the following links:



- Stopping food waste: <https://stopfoodwaste.ie/>
- Ireland's food waste per year: <https://foodwastecharter.ie/irelands-food-waste/>

For more information on the Farm to Fork initiative, click on the following links:

- Farm2Fork: <https://www.youtube.com/watch?v=HuocF3EhYjU>
- Farm to Fork diagram:
https://ec.europa.eu/food/sites/food/files/safety/docs/food_farm2fork_ring.jpg
- Farm to Fork Strategy: <https://www.foodnavigator.com/Article/2020/05/22/What-does-the-farm-to-fork-strategy-mean-for-the-future-of-food-in-Europe>
- Ireland and Farm to Fork: <https://www.arc2020.eu/farm-2-fork-a-truly-green-farming-food-and-rural-vision-for-ireland/>

From your research, you could include a fact, or several facts, found in the links above to display on your infographic. This could have a dramatic impact on the viewer, as they realise that in Ireland, we throw away a lot of food. By including information about the Farm2Fork initiative you could also encourage them to get involved and eat more sustainably. With your visual representation of this information, your infographic can reach your community more quickly, directly, and clearly. It is known that 90% of the information that passes through our brain is visual and that human beings process a visual element much faster than when we read the same idea in text. Here is hoping it will encourage your community to eat more sustainably!

Step 3: Menu Prep

For your infographic, you decide that you want to create a 3-course traditional Irish menu, based on sustainable food sources, to share with your community. You think that by showing others how they can prepare sustainable meals, that it will encourage them to enact this change within their own diets. You decide to investigate Irish sustainable food producers to put together your 'sustainable plate'.

The most important things to remember when preparing your 'sustainable plate' include:

- Ask where does the food come from? Is it locally sourced?
- Purchase seasonal foods.
- Consider purchasing organic produce.
- Buy foods with minimum food packaging (where possible).
- Avoid processed foods.
- Try to avoid food waste.



For more information on sustainable food sources in Ireland, click on the following links:

- Origin Green Sustainable Food Suppliers: <https://vimeo.com/294151032>
- Sustainable food producers: <https://www.origingreen.ie/who-is-involved/meet-a-member/meet-our-producers/>
- Sustainable Food manufacturers: <https://www.origingreen.ie/who-is-involved/manufacturers/>

For more information on Irish cuisine, click on the following links:

- Traditional Irish Foods: <https://www.ireland.com/what-is-available/food-and-drink/articles/10-traditional-foods/>
- Irish recipe ideas: <https://www.tasteofhome.com/collection/traditional-irish-food/>
- Traditional Irish recipes: <https://supervalu.ie/real-food/recipes/traditional-irish-recipes>

What is your favourite Irish meal? Try to create a 3-course menu that you know will be delicious! After you have picked your menu, conduct your research to see how and where you could gather your ingredients so that you know they are ethically, responsibly, and sustainably sourced.

Step 4: Time to Design

After you have decided what foods and facts you are going to include on your infographic, it is time to get designing! The best way to get your infographic noticed is to make sure that it is eye-catching, factual, and colourful! You can search the internet for inspiration to design your infographic, or perhaps you have some creative ideas of your own!

For more information on ideas and inspiration for your infographic, click on the following links:

- What is an infographic: <https://venngage.com/blog/what-is-an-infographic/>
- Best infographic examples: <https://visme.co/blog/best-infographic-examples/>
- Infographic Inspiration: <https://www.canva.com/learn/best-infographics/>
- Infographic Examples: <https://infogram.com/examples/infographics>

For more information on how to create an infographic, click on the links below:



- Infographic How-to: <https://piktochart.com/blog/how-to-create-an-infographic-and-other-visual-projects-in-5-minutes/>
- How to create infographics: <https://www.youtube.com/watch?v=nShmwzh879g>
- What makes an infographic effective? <https://www.youtube.com/watch?v=rl9ZcfKt8sY>

For platforms that you can use to create an infographic, click on the following links:

- Infographic Creator (Canva): <https://www.canva.com/create/infographics/>
- Infographic Creator (Venngage): <https://venngage.com/>
- Infographic Creator (Piktochart): <https://piktochart.com/formats/infographics/>

Step 5: Let's get sharing!

Now that you have created your infographic it is time to share it with your peers, youth leaders and community to encourage them to eat in a more sustainable way. You could print out copies and display them in your youth centre, but maybe this is not the most sustainable option. Instead, you could upload your infographic to your Youth Centre's social media page and promote sustainable eating on different social media platforms. The most important thing is to attract the attention of your community to have more eco-friendly diets that can have a positive impact on the environment and their own health!

For more information on how to upload your infographic to social media, click on the following links:

- Best practices for sharing on social media: <https://lemonly.com/blog/social-media-best-practices-for-sharing-infographics>
- Sharing on Facebook: <https://lemonly.com/blog/share-infographic-facebook>
- Sharing on Instagram: <https://www.socialmediaexaminer.com/5-ways-to-create-infographics-for-instagram/>

For more information on how to promote your Infographic on social media, click on the following links:

- Promoting on social media: <https://www.infographicdesignteam.com/blog/promote-infographics-social-media/>
- Promote your infographic: <https://visme.co/blog/promote-your-infographic/>



EVALUATION

As part of the assessment of this WebQuest, young people are being asked to work as part of a team to think about how the food they eat affects the environment, and to assess what changes they can make to the food they purchase and consume, to eat more sustainably. At the end they are also asked to prepare a sustainable menu of Irish food, which they can share with their families and friends to promote sustainable eating habits. Many of us are not aware of how many food miles accumulate just to wind up in our fridge, or how much food waste we produce and what the environmental cost of this is. Through this WebQuest, we are aiming to support young people to be more conscious of the food decisions they make, and to be aware of the environmental impact that food miles can have. Through this WebQuest, young people will also develop their creative media and digital skills, as well as their teamwork, collaboration and communication skills. These are all important skills for young people to have in the 21st century.

As a self- assessment exercise for this WebQuest, young people can write a short self-reflection of approximately 300 words about how you found the experience of working in a small team to raise awareness of consuming sustainable foods and preparing a 3-course Irish menu. The following questions will guide your self-reflection exercise:

- Did you learn the importance of eating sustainably in this WebQuest? Can you mention 3 reasons why this can positively affect the environment?
- Can you think of any other ways you could encourage others to be more eco-friendly when it comes to buying and consuming food?
- Did you find it interesting to learn about this topic through the form of a WebQuest? Explain your answer.
- Did you find that preparing a 3-course meal helped you to identify sustainable food sources? Why?
- How did you find working with your peers to critically evaluate an environmental issue in today's world?
- Do you think that raising awareness about environmental issues is important? Why?

CONCLUSION

Congratulations! You and your team have successfully raised awareness within your community about the importance of sustainable diets and buying sustainable produce. We



know that making even small environmentally friendly steps within our daily lives, can help to offset the damage of global warming. This can look to a more sustainable future, not only for us, but also for the planet and its natural resources. It is important to remember that if we care for our planet, our planet will in turn care for us too.

A sustainable diet is one that reduces the negative impact on the environment, helps to reduce our carbon footprint, preserves biodiversity while also encouraging us to eat healthier. Following a healthy and sustainable diet invests in the health of the entire human race. It is vital now to promote the importance of a sufficient, complete, balanced, and satisfactory diet that works to benefit the consumer and the environment simultaneously. Not only can this have a positive impact on our health, but it also has the power to advocate for the complete transformation of the global food system.

If you take one thing from this WebQuest, remember the following:

“Being green is more than just buying ‘eco’. It is an unshakable commitment to a sustainable lifestyle.”

– Jennifer Nini



Photo by Markus Spiske, on Unsplash



TUTOR SECTION

On completion of this WebQuest, young people will have achieved the following learning outcomes:

Knowledge	Skills	Attitudes
<ul style="list-style-type: none"> • Basic knowledge of sustainable food produce and practices. • Basic knowledge of social change that has impacted food systems and how this impacts the environment. • Factual knowledge of how to implement sustainable eating habits. • Factual knowledge about sustainable sources of food and producers. • Factual knowledge about how to recognise sustainable food produce (seasonal produce, locally sourced, etc.) • Factual knowledge of how to take part in a group work activity. 	<ul style="list-style-type: none"> • Discuss the role of food systems in contributing to environmental degradation, animal welfare concerns and human malnutrition. • Identify the diversity of ingredients that can be sustainably sourced. • Understand how locally and seasonally produced food can positively impact the environment. • List sustainably sourced ingredients. • Prepare sustainable and traditional dishes. • Explore the links between food choices and environmental sustainability. 	<ul style="list-style-type: none"> • Awareness of the environmental impact of not eating sustainably. • Willingness to engage in community action to promote environmentally friendly attitudes. • Appreciation of how working together as part of a team can be used to gather support for the greater good of the environment. • Willingness to advocate for the wellbeing of your community, the environment and the planet. • Willingness to encourage others to change their lifestyle habits to preserve the Earth's natural resources. • Willingness to promote the impact



<ul style="list-style-type: none"> • Factual knowledge of how to produce an infographic. • Factual knowledge of online research techniques. • Theoretical knowledge of the value of eating sustainably. • Theoretical knowledge of the positive environmental impact of eating sustainably. 	<ul style="list-style-type: none"> • Develop collaboration and teamwork skills. • Participate in group work activities to generate new ideas. • Create a plan to encourage others to be environmentally friendly with their eating habits. • Develop an infographic to display researched information. • Work together as part of a team to achieve a positive outcome. 	<p>of farming, seasonally produced food on climate change and natural resources.</p> <ul style="list-style-type: none"> • Appreciation of how eating sustainably can positively impact our health and the planet.
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Questions that a youth worker or teacher might use in a whole class discussion to debrief this WebQuest:

- How would you rate the over-all experience? Did you enjoy learning through completing a WebQuest challenge?
- Did you enjoy the scenario? Do you think that this is an engaging way to learning about sustainable eating? Why?
- Did you enjoy preparing a sustainable menu to promote sustainable eating within your community?
- Were you happy with the infographic that you and your team developed? Do you think it will encourage others to think about their personal impact on the environment?
- Can you mention the 3 most important things you have learned from this challenge?
- Do you think that learning about sustainable eating will encourage you to make changes with your own food consumer habits?
- Do you think informing others of sustainable eating practices could change the way that we consume food? Why? Why not?



SOLUTION NOT POLLUTION



Co-funded by the
Erasmus+ Programme
of the European Union

"The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein."
Project Number: 2019-3-IE01-KA205-065708