



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:

TIME ALLOCATED:	6 – 8 hours
TITLE OF THE WEBQUEST:	Create a Sustainable Take Away Menu for Your Trip
INTRODUCTION	
<p>In this WebQuest, you will learn about sustainable food in your home and outside your home anywhere you go.</p> <p>As we walk around the supermarket, we are looking for our favourite products and culinary inspiration. Food sustainability is not often at the forefront of our minds. Recently, you may have noticed a growing movement when it comes to food shopping and consumption. For the first time in a long time, people are starting to pay attention to where their food comes from. Our decisions are based on convenience, taste, and price. Even for those of us who wish to live more planet-friendly lives. Our food choices can make a positive difference to people and nature – improving our own health, the health of others, and the health of the planet. More and more, people are choosing sustainable, fresh foods, grown locally, and grown and produced in a response in a sustainable way.</p> <p>The world population is expected to grow to almost 10 billion by 2050. With 3.4 billion more mouths to feed, and the growing desire of the middle class for meat and dairy in developing countries, means that agriculture around the world needs to step up production and increase their yields. However, according to scientists, climate change impacts will be seen, such as; higher temperatures, extreme weather, drought, increasing levels of carbon dioxide, and sea-level rise. These all threaten to decrease the quantity and jeopardize the quality of our food supplies.</p> <p>Having a better understanding of what makes food sustainable could help us to make more informed decisions. It would allow us to weigh up products and brands more easily. But over-dependence on selected foods, a lack of diversity in our diets and the continued consumption of unsustainably produced items have a harmful impact on nature. More and more, people are choosing fresh, sustainable foods, grown locally and grown and produced in a responsible, sustainable way. This includes meats as well as vegetables and fruits.</p>	



When you start paying attention to where your food comes from and how it is grown, produced, harvested, and prepared, you are taking control of your health. But even more than that, you are helping your community.

In this WebQuest, you will experience how to eat in a sustainable way no matter where you are. You will also learn why is it important for our environment to eat in this way.

Congratulations! You have completed this short introduction. For more WebQuests, please visit the project website at <http://www.solutionnotpollution.eu/EN/index.html>.

TASK

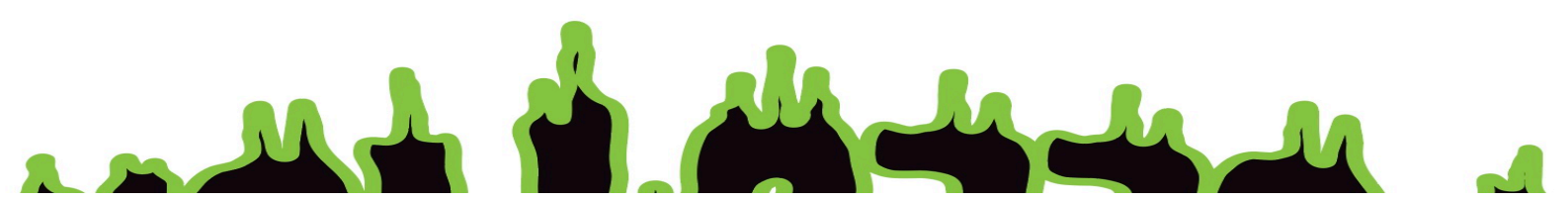
If you're worried about climate change, one of the best ways to have an impact is to pay attention to what's on your plate. 33% of all human-caused global greenhouse-gas emissions, is caused by food, which contributes more than the entire transportation sector. And it's not just one aspect of food production that's to blame: it's a big, messy tangled web, which makes meaningful change seem daunting.

Imagine the situation: you and your friends are going on a trip and you want to eat in a sustainable way. What will you pack for yourself? Or which restaurants you will visit? How will you know if the restaurants are sustainable? And this is the mission of this WebQuest.

Imagine the situation: You and your three friends are going on a day trip. You have decided not to buy anything due to your outdoors adventure so you will carry everything that you plan on consuming. In the case that you find the restaurant, you can eat there but only if the restaurant is a sustainable way. How can you know?

Since you are going on a trip to the mountains in the morning, you have to take enough food with you. You have a challenge, the food you take with you should harm the planet in as little a way as possible. Your challenge is to create a menu! In this WebQuest, you will learn general information about sustainable food, about your food waste!

At the end of this task, you will be able to create a meal plan for your day away from your home! You can be an inspiration for other teams or your family! And you will even shoot video with your smartphone!



Are you ready? Let's go on a journey of sustainable food!

PROCESS

Step 1: What Does It Mean to Eat in a Sustainable Way?

Before we start learning about sustainable food, take sustainable quizzes and learn how you can be a better foodie.

- Sustainable Food Quiz, Part 1 :
<https://www.nationalgeographic.com/environment/quizzes/sustainable-food-quiz-part-1/>
- Sustainable Food Quiz, Part 2:
<https://www.nationalgeographic.com/environment/quizzes/sustainable-food-quiz-part-2/>
- Climate change food calculator: What's your diet's carbon footprint?:
<https://www.bbc.com/news/science-environment-46459714>
- Food Carbon Footprint Challenge: <https://earth911.com/quiz/quiz-87-food-carbon-footprint-challenge/>
- Find Your Foodprint: <https://foodprint.org/quiz/>

Is anything that surprises you? Have a quick discussion with your team and delve deeper into this topic.

How our food is produced and what types of foods we consume can have significant impacts on our environment. Nurses can play a key role in reducing these impacts through their own choices, client education, and being involved in the food choices available at their medical facility. Listed below are some of the challenges of our current food system that can impact health, including antibiotic resistance, farmworker exposure, industrial farming, access to fresh fruits and vegetables, and the decline of the bee population due to pesticide use.

Take a look at videos and articles which provide you information about the definition of what sustainable food is:

- What is Sustainable Food: <https://www.thedailymeal.com/healthy-eating/what-sustainable-food-and-why-and-how-should-you-cook-it-slideshow/slide-2>



- Sustainable Food Facts: <https://www.youtube.com/watch?v=f0ZxyoN9ax0>
- The Diet that helps fight climate change: <https://www.youtube.com/watch?v=nUnJQWO4YJY>
- This website provide you the tools and resources to help you eat more what does sustainably: <https://foodprint.org/eating-sustainably/>
- 8 easy ways to eat more sustainably: <https://hellogiggles.com/lifestyle/food-drink/ways-eat-more-sustainably/>
- What You Eat Can Impact Climate Change! See 9 Foods That Harm the Planet and 11 Foods That Can Help Save It: <https://foodrevolution.org/blog/food-and-climate-change/>
- Grow your own food: <https://www.sustainablelivingguide.com.au/growyourownfood>

You went through the first step and maybe you have already ideas which meals you will prepare for your trip, you have also learned what sustainable food is.

Step 2: Explore Problems - Pesticides

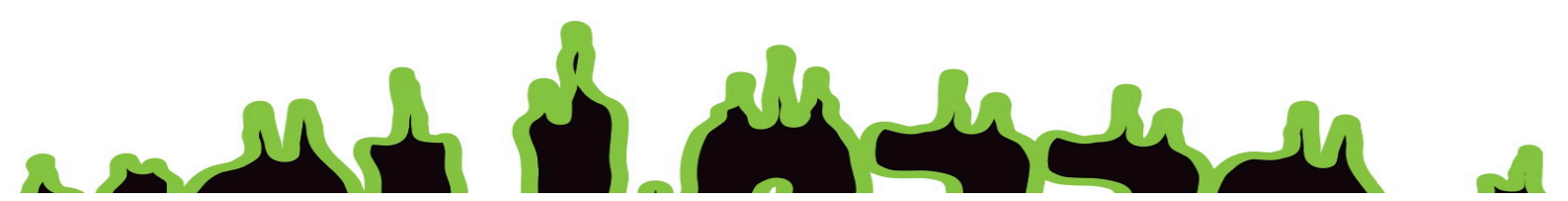
When reading the article above, you found a lot of terms mentioned such as pesticides and carbons. In this step, you will learn more about them. Let's start with pesticides:

The pesticide problem

Chemical residues show up in virtually every life form and contaminate groundwater, soil, oceans, and streams. Supporting organic agriculture may mean a pricier trip to the market, so here are a few tips for doing it on a budget.

- Watch this intro video and enjoy the tips: <https://www.youtube.com/watch?v=LOYIShOnUkQ>

Pesticides are commonly used in agriculture to minimise pests to improve crop yields and agricultural productivity. However, there are long term environmental impacts that result from the overuse of these chemicals. Pesticides are carcinogenic and cause problems to our nervous system, endocrine system, and lungs when inhaled. Pesticides infiltrate our groundwater supply polluting our water, contaminate our food, and create an increased risk of exposure for farmworkers. Additionally, the use of neonicotinoids, a commonly used insecticide in agriculture, has been linked to a phenomenon called colony collapse disorder



and subsequent decline in bee populations. This is concerning as bees are necessary for the pollination of crops and a thriving food environment.

- What are pesticides and how do they get into our food?
<https://www.youtube.com/watch?v=aTm7i84mcMI>
- What is Pesticide? Explain Pesticide, Define Pesticide Meaning Pesticide:
<https://www.youtube.com/watch?v=GrTXKPLV9DQ>
- How to Wash Off and Remove Surface Chemicals From Produce Vegetables and Fruit: <https://www.youtube.com/watch?v=sjhhdRK0-II>

Very good job, you analysed the problem with pesticides! Maybe it shocked you and now you are ready to read about other problems. In this WebQuest these problems are mentioned for you to be aware of them and to act to change the world to create a better environment for everybody.

In the next step take a look at some articles which provide you with information about another big problem: Carbon.

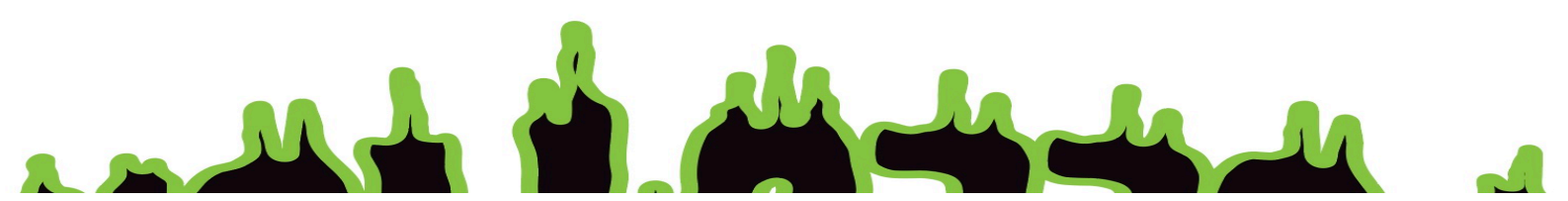
Step 3: Explore Problems - Carbon

People across the world are becoming increasingly concerned about climate change: 8-in-10 people see climate change as a major threat to their country. Rightly, there is a growing awareness that our diet and food choices have a significant impact on our carbon 'footprint'. What can you do to really reduce the carbon footprint of your breakfast, lunches, and dinner?

- Food's Carbon Footprint: <https://www.greeneatz.com/foods-carbon-footprint.html>
- Why beef is the worst food for the climate:
<https://www.youtube.com/watch?v=3lrJYTsKdUM>
- Why do we need to change our food system?
<https://www.youtube.com/watch?v=VcL3BQeteCc>

After reading the above-mentioned articles, go back to your grocery list and think how and what could be done to change the attitude of ordinary people regarding healthy dieting and sustainable ways of eating.

Step 4: Eat Local and Seasonal



Powering hothouses and flying fresh fruit and vegetables around the world uses a lot of energy. By eating local, seasonal food you cut the need for either of these, slicing about 1.3 kgCO₂ off each meal.

Both locality and seasonality must be considered: for example, in winter it would be more efficient to import tomatoes from Spain than grow them in a British hot house, but in summer British grown is the outright winner.

Bear in mind how things are imported - foods like berries, asparagus, and salads that have a very short shelf life have to be flown in. Buying only local, seasonal food can be a challenge at first, but once you've got it cracked it'll be super rewarding.

- Why Buy Local Food? It's Healthier for You and Better for the Environment: <https://foodrevolution.org/blog/why-buy-local-food/>
- Is eating locally grown food healthier for you? <https://www.virtua.org/articles/is-eating-locally-grown-food-healthier-for-you>
- What we eat matters: to change climate crisis, we need to reshape the food system: <https://www.theguardian.com/commentisfree/2019/oct/08/climate-change-food-global-heating-livestock>
- How To Support Your Local Farmer: <https://thekindlife.com/blog/2020/10/how-to-support-your-local-farmer/>
- The tricky truth about food miles: <http://shrinkthatfootprint.com/food-miles>
- The Importance of Buying Local Produce: <https://www.youtube.com/watch?v=fwdJJGijx44>
- Seasonal diets could be the answer to food sustainability.
- <https://www.independent.co.uk/news/health/seasonal-diets-food-sustainability-climate-change-crisis-a9116981.html>
- How Your Food Choices Can Help Fight Climate Change: <http://www.eatingwell.com/article/290798/how-your-food-choices-can-help-fight-climate-change/>

Step 5: Sustainable Take Away Food and Food Waste Issue

Your goal was to create the menu for your trip, but imagine that you are in a situation that you cannot prepare in your own kitchen, what you will do? How will you take away food in a sustainable way? You have to buy it in the restaurant. How to make it in a sustainable way?



Read some tips which are as well about packing, it can also inspire you to pack your homemade food!

- 8 Ways to Tell if a Restaurant is Eco-Friendly: <https://livegreen.recyclebank.com/8-Ways-to-Tell-if-a-Restaurant-is-Eco-Friendly>
- What Does A Sustainable Restaurant Look Like?: <https://www.saladplate.com/blog/sustainability-what-does-a-sustainable-restaurant-look-like/>
- Guide to sustainable takeaway packaging: <https://www.chefnetwork.ie/blogs/chef-network-team/2020/08/25/guide-to-sustainable-takeaway-packaging>
- Sustainable Takeout: <https://www.trendhunter.com/protrends/sustainable-takeout-togo-food-packaging-focuses-on-environmentallyfriendly->

If you're picking up your own takeaway, reducing packaging waste is relatively easy—simply bring your own reusable containers. Start with what you already have at home instead of going out to buy new ones. Make sure they're spotless and dry before you head to the restaurant, and check with the restaurant in advance that they're accepting reusables.

Let's focus on FOOD WASTE. "If food waste were a country, it would be the third-largest emitter of greenhouse gas, behind China and The U.S.," says Richard Waite, an associate at the World Resources Institute's Food Program

- How much food do you really waste? Take the quiz, and get tips to help reduce food waste. <https://ivaluefood.com/quiz.php>

Read the articles below about food waste and how to act to avoid it:

- 10 Facts You Might Not Know About Food Waste: <https://foodtank.com/news/2015/06/world-environment-day-10-facts-about-food-waste-from-bcfn/>
- The Problem of Food Waste: <https://foodprint.org/issues/the-problem-of-food-waste/>
- How to Reduce Food Waste & Create Sustainable Food Habits: <https://www.youtube.com/watch?v=c3AFJEbhzuA>
- Food waste in restaurants: out of home, out of mind? <https://www.theguardian.com/sustainable-business/food-waste-eating-out-restaurants>



- How cutting your food waste can help the climate: <https://www.bbc.com/future/article/20200224-how-cutting-your-food-waste-can-help-the-climate>
- Food waste is the world's dumbest problem: <https://www.youtube.com/watch?v=6RlxySFrklM>
- Food Waste causes Climate Change. Here's how we stop it: https://www.youtube.com/watch?v=1MpfEeSem_4

Step 6: Create Your Own Take Away Menu

Now you got so much information, how to eat sustainably and you are ready to create your own take away menu. Be creative and prepare your signature dish.

So how many dishes will there be? How will you carry them? Where will you buy ingredients for the dishes? You know that it is not the last time that you will go on a trip and you will prepare the meals for you and your team. You can prepare simple recipes for your menu to apply and to inspire other:

- How to Develop a Recipe Like a Test Kitchen Editor: <https://www.bonappetit.com/test-kitchen/inside-our-kitchen/article/how-to-create-a-recipe>
- How to Become a Skilled Recipe Creator: <https://www.culinarynutrition.com/how-to-become-a-skilled-recipe-creator/>
- 6 strategies to create more sustainable meals: <https://green.harvard.edu/tools-resources/green-tip/6-strategies-create-more-sustainable-meals>
- 13 Ways to Create a Sustainable Restaurant Menu: <https://www.touchbistro.com/blog/sustainable-restaurant-menu/>
- What makes a sustainable menu? <https://sustainablefoodtrust.org/articles/what-makes-a-sustainable-menu/>

Congratulations, you have prepared the menu and packed for your trip.

Share this challenge with your friends via video. Record the story of your meals that you take on your trip and document your trip as well. Record a video with the recipe. Give others good tips on what food they can prepare, how to pack it! Have a lot of fun.

In the following steps, you will find a few tips on how to easily make a video on your mobile phone.



Where you publish the video is up to you! Above all, have fun and spread the idea of sustainable food!

Step 7: Make a Video Recipe and Shoot Your Trip!

Video recipes are easier to use and understand and have targeted content to any particular mood or taste in a specific moment. No cookbook collection is required or collected slowly over time – just Google the recipe you fancy creating right now, and from any device, even the most novice of chefs can prepare something that is acceptable for the dinner table!

Be an inspiration to others, be creative and make a video of your sustainable food to take away. Your own menu is worth it!

Read many tips how to shoot simple video with your smartphone:

- How to shoot your cooking videos with your phone: <https://www.youtube.com/watch?v=J2AGHq-Y4yE>
- How To Make an Aesthetic Videos Like Haegreendal With Your Phone: <https://www.youtube.com/watch?v=6sU4duA7bbQ>
- How To Shoot High Quality Food Videos Like A Pro | Filmmaking & Editing Tips: <https://www.youtube.com/watch?v=KNWgQ77WhoA>
- How to Edit Videos on Android: <https://www.lifewire.com/how-to-edit-videos-on-android-4770052>
- 10 tips for recording better video with your smartphone: <https://www.pocket-lint.com/phones/news/131351-10-tips-for-recording-better-video-with-your-smartphone>

EVALUATION

As a self- assessment exercise for this WebQuest, please answer the following questions and share your thoughts and insights with your teammates:

- What contents of this WebQuest did I value the most?
- What contents from this WebQuest will be the most useful for me in the future?
- Will I eat sustainably? Will I focus more on food waste and / or on packaging?
- Do I already know local farmers? Do I know from where I can buy my sustainable food?



- Did any information shock me?
- How can I improve my lifestyle?
- How will I pack my takeaway meals in the future?
- How will I share what I have learned with my friends?

CONCLUSION

Congratulations! You have taught a bunch of new information on how to eat sustainable and why food is important in the fight against climate change. You will also support the local economy by buying food from local farmers. Eating local foods is better for you, for the environment, and for your taste buds. Money spent with local farmers, growers, and artisans and locally owned purveyors and restaurants all stays close to home. It works to build your local economy instead of being handed over to a corporation in another city, state, or country. Since the food moves through fewer hands, more of the money you spend tends to get to the people growing it.

This WebQuest involved two practical tasks. One of the most important tasks was to compile your own menu, which you can take with you on a trip. And the second part involved making a video. You also gave your friends some tips on what meals they can prepare themselves and how to do it.

Enjoy your meal 😊

Good food is healthy food. Food is supposed to sustain you so you can live better, not so you can eat more. Some people eat to live, and some people live to eat.

Yolanda Adams

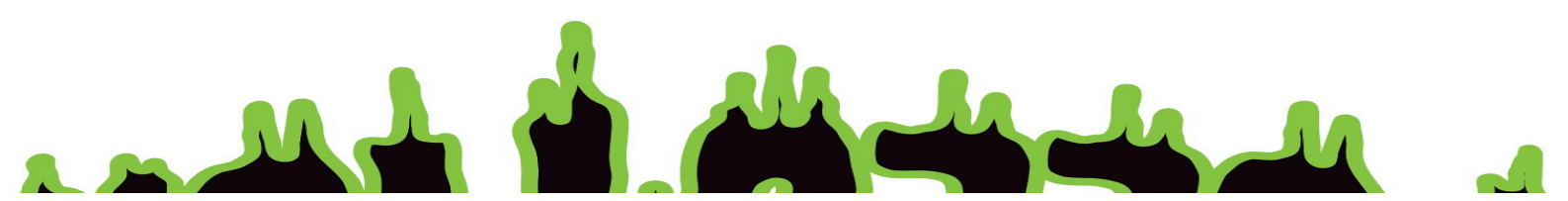




Photo by Zach Reiner on Unsplash

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. • Basic knowledge of pesticides. • Basic knowledge of carbon. • Basic knowledge about seasonal and locally sourced food. 	<ul style="list-style-type: none"> • Define the meaning of the term “sustainable plate”. • Define the term “sustainability and pesticides”. • Define the term “Carbon footprint”. • Define the term “local and seasonal food”. 	<ul style="list-style-type: none"> • Willingness to be more creative when cooking and creating meals. • Openness to identifying harmful products that are used on our foods. • Awareness of our carbon footprint.



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| <ul style="list-style-type: none">• Factual knowledge about food waste, packaging, take away sustainable food.• Theoretical knowledge how to create a menu.• Basic knowledge about how to develop video with smartphone. | <ul style="list-style-type: none">• Discuss the environmental benefits of food waste and packaging.• Discuss the health benefits of eating locally sourced and seasonal food. | <ul style="list-style-type: none">• Openness to eating local and seasonal foods.• Awareness of food waste and packaging.• Openness to try new cooking methods.• Eagerness to be creative in the kitchen. |
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Questions that a youth worker or teacher might use in a whole class discussion to debrief this WebQuest:

- Can you name three things which you found to be the most interesting in this WebQuest?
- How did you feel working in a group?
- How did you like creating new recipes?
- Would you change anything if you had more time?
- Are you satisfied with the videos that were created?
- Do you think you will use the knowledge you have gained in the future?



SOLUTION NOT POLLUTION



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