

## WebQuest

**Title:** Food packaging – is it useful? Sustainable? What are the real sustainable choices in food packaging?

**Target Age Group:-** Year 9

### Possible integration with Curriculum:-

- Languages
- Media Studies
- Environmental Studies / Social sciences
- Home Economics

### Introduction:

Single use plastics / food packaging have long been criticised as causing unnecessary waste around us. Is this really the case? Can we do without food packaging? What would the repercussions be?

- Watch this video as a mind teaser on the negative and positive side of plastics – and how our choices should be based on critical thinking and sustainable choices



<http://www.cleaneas.org/did-you-know#>

### Points to ponder on:

- Consider environmental impact of plastic vs paper vs cloth
- Effect on food (durability, waste, life span) if plastic is banned
- How can food be conserved and plastic avoided?

## Objectives of the WebQuest:

- Students learn how to be critical of online statistics / information about food conservation and food shelf life
- Students investigate how food is currently being packed, why packaging is needed and if we can do without
- Students investigate the shelf life of food with or without packaging
- Students highlight the critical thinking needed in our food choices, and how we can be more sustainable

## Main Text – background information, research for solutions, the next step forward

*Sustainability continues to be a major global trend in the packaging industry as consumers consistently seek out healthier food options and manufacturers whose innovative packaging and processes positively impact the environment and the quality of their goods. In fact, sustainable packaging has never been more important, according to 92% of the respondents to Packaging Digest's 2017 Sustainable Packaging Study.*

*While sustainable packaging used to simply mean packaging that may be composted, recycled or reused, in 2018 we'll see manufacturers put a focus on packaging technologies and trends that allow for the reduction of waste and provide a safer product while enhancing their brand message.*

*Here are four areas where sustainability is making a significant impact in food packaging.*

### **1. The reduction of food waste is a priority**

*According to The New York Times, 60 million metric tons, or about \$162 billion of food, is wasted every year in the United States alone. Not only is this a significant economic burden, but it's also an environmental one, as wasted food eventually ends up in landfills where it emits methane, a powerful greenhouse gas.*

*As the impact of wasted food gains awareness, consumers are taking steps to reduce their contribution by composting leftovers, sharing food and selecting perishables that will stay fresher longer.*

*To meet the consumers' demands for healthy and longer lasting foods, manufacturers must develop packaging that is able to extend a product's shelf life without impacting the quality or integrity of the product it contains.*

### **2. Food safety must be taken seriously**

*Extending a product's shelf life does more than reduce global food waste and prevent consumer health issues, as maintaining food freshness and eliminating contamination may have environmental implications as well. Any food safety recall, those relating to shelf life or contamination during production, could potentially mean enormous quantities of wasted food, as well as the use of additional resources during the reproduction and transportation of the product.*

*Still, it's no surprise that balancing food safety and sustainability is an integral aspect of maintaining customer trust and loyalty as consumers today are demanding more information about the quality of their food.*

### **3. Sustainability will become part of the brand message**

*Companies are becoming more environmentally conscious than ever, often seeking out ways to make a positive impact on the environment without making major adjustments to their lifestyle. So selecting products in sustainable packaging or engaging with companies known for their sustainable practices is often a relatively easy way for consumers to feel like they're making a difference.*

*Sustainable Brands, a global learning, collaboration and commerce community of forward-thinking businesses, reports that 42% of consumers are willing to pay more for products and services provided by companies that are committed to green initiatives. This means manufacturers must not only consider incorporating new and interesting materials into their packaging—such as opting for plastic packaging over glass or adding a paperboard element—but become more transparent about their processes, as well.*

#### **4. Sustainability is an investment worth making in 2018**

*While many companies avoid making sustainable improvements, assuming there will be a hefty upfront investment required, the reality is that going green in 2018 simply makes smart business sense. The return on investment will generally be positive, especially given that demand for green products and solutions continues to grow.*

*Innovative companies who truly listen to the wants and needs of their consumer audience will continue to make strides toward a safer product and a healthier planet.*

*(<https://www.packagingdigest.com/sustainable-packaging/4-sustainable-truths-impacting-food-packaging-today-2018-03-29>)*

## Task

Refer to the video in the introduction (<http://www.cleaneas.org/did-you-know#>) – especially from 6:06 – 09:01. Discuss the content - whether plastic can / should be abolished, ask why we emphasise reusables when they have implications on their own – check the connection between food safety, food shelf life, food waste and packaging. Be critical, and search for solutions that might be already working.

## Suggestions for action

- Take a particular type of food (example a lettuce sealed in plastic) . Take another one without packaging. Compare the shelf life of both of them - is it true that packaging prolongs conservation and reduces food waste?
- Ask local food packagers on why they use packaging for fresh food, in particular fruit and vegetables, fresh meats, bread and confectionery items.
- Ask the consumers if they would opt for non packaged fresh food, given the choice.
- Ask the consumers if the amount of food purchased would vary if it were not already packed (ex nuts, cooked food, vegetables). Would non packaged food reduce the amount of food bought, and thus less food waste?
- Explore (through the web) any kind of sustainable packaging that reduces food waste but is sustainable more than plastic.
- Explore an effective way in which consumers may be encouraged to take their own containers when going shopping – thus reducing waste and taking the benefits of packaging.
- Make use of the web to search for different opinions, solutions and suggestions. List in a table as ideas of how to be more sustainable. Ex:-

Apples	Take your own bag and refuse packaging
Nuts	Opt for food by weight and take your own containers. Buy only the amount you need
Lettuce	Choose one without packaging; not needed
Peas	Opt for compostable bags, and make sure to dispose correctly
Cooked food	Take your own container. Buy only the amount you will consume. Dispose of leftovers in organic bin.

## Process

At the end of the webquest the student will be able to:-

- Be more critical of food choices as consumers
- Be selective on which food to choose, and what kind of packaging
- Be assertive when arguing on his/her choices
- Be able to address issues related to sustainable food packaging
- Provide alternatives for labelling on unpackaged food

## Resources

- <http://edepot.wur.nl/384912>
- <https://www.foodpackagingforum.org/news/unpackaged-foods-trending-in-the-u-s>
- <http://www.foodauthority.nsw.gov.au/foodsafetyandyou/food-labelling/how-to-read-a-label/fresh-or-unpackaged-food>

## Photographs

- Take photos that would transmit the message of no packaging / no food waste. Publish online to raise awareness and encourage others to do the same.



## VIDEO

- Take a video that transmits the message of no food waste / no packaging / sustainable choices. Publish online to make yourself heard!

<https://www.youtube.com/watch?v=Jl2yWin3gi8&t=22s>

## Learning Outcomes

- Identify and explain what sustainable choices / sustainable consumers are
- Know the process taken for food packaging, and its implications
- Analyze the pros and cons of food packaging, and relative consequences
- Discuss issues related to sustainable choices, and make the best choice according to the situation
- Integrate with language lessons (written and spoken), maths (analysis of data) and social subjects
- Make use of media and social networks for educational purposes

## Evaluation

Acquired competences	Social Skills	Knowledge
<ul style="list-style-type: none"><li>- Learning to do and act</li><li>- Learning to be aware of the consequences of one's choices</li><li>- Learning to analyze choices</li><li>-</li></ul>	<ul style="list-style-type: none"><li>- Learning to ask questions</li><li>- Learning to raise awareness through media (photos and videos)</li><li>- Learning to make themselves heard – even with leaders and important persons</li></ul>	<ul style="list-style-type: none"><li>- Learning to do research and be critical of online news</li><li>- Learning to outline the effects of plastic / packaging on our environment</li><li>- Learning to identify marketing vs information techniques</li></ul>