

Food – Access & Safety

Background

Everyone needs to consume nutrient rich foods to live a healthy lifestyle. Our current food system focuses on food production at a lower cost; however, it does not address access to safe, nutritious and sustainable food. Traditional food growth alters the natural environment, deteriorates soil quality, and eliminates biodiversity. What we eat may be determined by the availability, the taste and dietary restrictions. How much we eat may be determined by availability, cost and our behavior. The quality of what we eat may be determined by how our food was grown and prepared. Some food packaging may contain materials that are non-biodegradable, such as Styrofoam and plastics; others contain chemicals such as BPAs that may be harmful to our health. In addition, transporting food requires oil and other fossil fuels which adds to our planet's carbon emissions.

Problem Statement

Given our traditional food system, how might you improve or create a solution that ensures that all people, consistently have the physical, social and economic abilities to meet their dietary needs for maintaining healthy life? How can people be educated about healthy eating habits? What are ways in which food should be transported and stored to areas that need it most?

Goal

Develop a solution that address the following topics:

Increase Yield:

- How might we address the significant amount of chemicals and energy generated globally for growing or otherwise making food?

Access:

- How might we help people with limited physical, social and economic access obtain safe and nutritious foods that meet their dietary needs and preferences?

Safety and Consumption:

- How might we provide a solution that assures consumers that their food was handled up to industry standard and is safe for consumption

Packaging and Transportation:

- How might we provide a solution that yields an eco-friendly alternative to packaging and transportation?

Potential sources

Articles

- <https://www.greenbiz.com/article/world-has-packaging-problem-new-tool-gives-companies-ability-fix-it#:~:text=In%20addition%20to%20filling%20up,their%20reputation%20on%20the%20line>
- <https://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/>
- https://www.cdc.gov/healthyschools/nutrition/school_nutrition_education.htm
- <https://www.calorieking.com/us/en/>
- <https://www.webmd.com/diet/healthtool-food-calorie-counter>

Data

- https://aws.amazon.com/marketplace/pp/prodview-zxtfgtxz6ekh4?sr=0-1&ref_=beagle&applicationId=AWSMPContessa#overview
- <https://www.kaggle.com/jpmiller/food-security-indicators-for-the-world-20162020>
- <https://www.ers.usda.gov/data-products/food-access-research-atlas/>