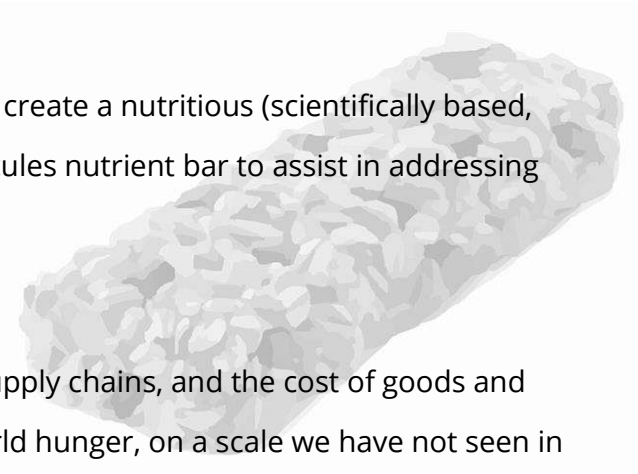
PBL - Macromolecules

INSTRUCTOR:
no_reply@example.com



Research Question

How can we as scientists research, design, and create a nutritious (scientifically based, nutrient rich, balanced - 3 of the 4 macromolecules nutrient bar to assist in addressing world hunger.

Instructions / Introduction

With an unstable global economy, disrupted supply chains, and the cost of goods and services increasing at an exponential pace, world hunger, on a scale we have not seen in generations, is an increasing threat to populations world-wide. In order to ease this crisis, it is imperative to come up with cost effective, nutritious, and sustainable solutions for those suffering from lack of food, living in “food deserts”, or in areas affected by climate change.

Statistics on Global Hunger

https://www.actionagainsthunger.org/world-hunger-facts-statistics

Procedure

1. Research a specific area of the globe, find:
    a. Statistics for that specific area on poverty and food distribution
    b. local , native foods grown or imported for that area
    c. Health statistics related to:
        - Disease
        - Mortality
        - Specific affected populations
2. In a “bar” form -

a. Find ingredients that contain the necessary FDA requirements for a single meal
b. Experiment and create the bar that is for your specific area, trying to replicate local foods/ingredients

Outcomes

1. A Bar containing your researched ingredients
2. Recipe for your bar
3. Realistic, approximate cost per bar
4. Packaging
5. Nutrition Label
6. Presentation of your product
7. Taste

Evaluation

- Rubric for your presentation (rubric)
- Packaging
- Look, feel, and taste of your bar
- Completion of said outcomes

Due Date: _____