The FONS Project

By Derek Dela Cruz, Daniel Ford, and James Wreden



Problem: World Hunger

- 11% of all people in the world are hungry
- 15 people per minute die from starvation
- Our bodies require food in order to gain energy
- Food is essential for us and many organisms to live
- Because of the lack of easily produced and environmentally friendly foods, the world is struggling to prevent world hunger
- Many people around the world are starving
 - This is why we have set out to find a solution



Solution

Our solution is to this lack of easily produced, highly efficient, and environment friendly foods is to mass produce a cheap, nutrient efficient, environmentally friendly "superfood".

Solution

- Two pieces of the solution:
 - Nutrition bar consisting of fruits, oats, and nuts
 - Soy milk
- A "meal" would consist of 3 nutrition bars and 8 cups of soy milk
- In this food and drink, every necessary nutrient is present

The Making of Our Superfood:



2 1/2 cups old fashioned rolled oats

1/2 cup nuts, roughly chopped (1/4 peanuts, 1/4 walnuts)

1/4 cup honey

1/4 cup unsalted butter

1/3 cup brown sugar

1 teaspoon vanilla extract

1/4 teaspoon salt

3/4 cups dried fruit (about 3/8 cups of dried oranges, 3/8 cups of dried pears)

Cooked in a 9in x 9in pan

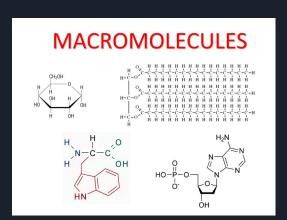


Facts

- Recipe makes 8 nutrition bars (each one is 15.2in^3)
- Dimensions are roughly 2in x 5.1in x 1.5in
 - Nature Valley Granola Bar is about 25in^3
- Each bar has 522 calories
 - 8 bars has 4176 calories
- Each cup of soy milk has 131 calories
- 3 bars + 8 cups of soy milk = 2614 calories

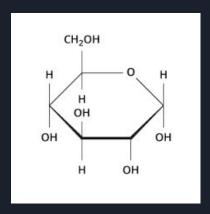
Why Our Solution?

- Our nutrition bar and soy milk contain all the necessary molecules needed for a human to survive
- Humans need 4 macromolecules to survive:
 - Carbohydrates
 - Proteins
 - Lipids
 - Nucleic Acids
- Also need fiber, vitamins, minerals, and water



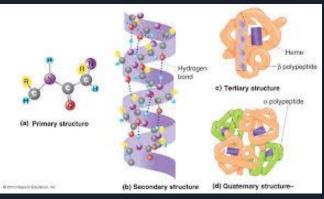
Carbohydrates

- Provide body with energy
- Simple sugars provide short bursts of energy
 - Quickly digested
 - Found in candy bars, sweet drinks
- Complex sugars provide energy longer
 - Take longer to digest
 - Found in pasta, bread, and potatoes
- Found in the oats of our nutrition bar



Proteins

- Speed up chemical reactions using enzymes
- Build and repair muscle and tissue
- Found in meat, fish, nuts, milk, soy, and eggs
- Made of amino acids
- Found in the walnuts and peanuts of the nutrition bar



Lipids (Fats)

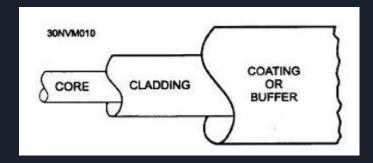
- Make up cell membrane and provide structure
- Provide insulin
- Long-term energy storage
- Found in meat, fish, oils, nuts, eggs, and avocados
- Found in the walnuts and peanuts of our nutrition bar

Nucleic Acids

- Store and carry genetic information
- Come from vitamins and minerals in our diet
 - Come from fruits, vegetables, grains, meat, etc.
 - Pretty much found in anything with nutritional value
- Found in the walnuts and peanuts of our nutrition bar

Fiber

- Helps control blood sugar levels
- Found in lentils, pears, beans, almonds, and lima beans
- The dried pears and oats in our nutrition bar have fiber



Vitamins

- Hundreds of roles in our body
 - Fix bones, heal wounds, boost immune system, convert food into energy
- Vitamin A comes from soy milk
- B Vitamins comes from soy milk and oats
- Vitamin C comes from dried oranges
- Vitamin D comes from the sun
- Vitamin E comes from the oats
- Vitamin K comes from the soy milk and dried pears

Minerals

- Also perform hundreds of roles in the body
 - Building bones, transmitting nerve impulses
- Copper comes from the peanuts and walnuts
- Iron comes from dried pears and oranges
- Calcium comes from soy milk
- Sodium comes from the salt
- Zinc comes from oats
- Potassium comes from soy milk
- Chloride comes from salt



Water

- Our body is 60% water
- Water helps regulate temperature, maintain bodily functions, and filter out toxins
- Comes from the soy milk



Cost

- \$2 a bar
- \$4 for half a gallon of soy milk
- Meal: 3 nutrition bars a day + 8 cups of soy milk
- \$10 per daily meal (2614 calories)
 - 2090 calories is \$8 (only 4 cups of soy milk)
- 2000 calories of Soylent 2.0 is \$12.10
- 2000 calories of Soylent 1.5 is \$7.70



The Plan

1) Patent the Product

- We will have full control over the product
 - Utility patent
- We can control the production and distribution of the food
- No one can steal our idea

2) Begin Producing it in the United States

- Publicize the idea, get it out there
- Produce the product slowly in gradually greater quantities
- If it reaches a point of automation, ensure the factories are 100% eco-friendly
 - Green energy (solar panels, windmills)

3) Get the Product on Store Shelves

Spread the product around stores nationally

aid



Google Forms Survey:

Hi hungry, I'm dad!

https://forms.gle/TFKwWzd8pQMokeQY9