## The FONS Project

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## 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 $15.2 \mathrm{in}^{\wedge} 3$ )
- Dimensions are roughly 2 in $\times 5.1$ in $\times 1.5$ in
- 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

MACROMOLECULES


## 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, l'm dad!
https://forms.gle/TFKwWzd8pOMokeOY9

