

**2009 Peanut Butter Manufacturing and Sales Proposals**

**Peanut Butter Project Label**

**¡Zona Divertida!**  
 Antes de la edad 18, un chico americano típicamente come 1500 sandwiches de mantequilla de maní.

Se puede usar la mantequilla de maní cremosa para quitar el chiclo de la ropa y del pelo.

**Ingredientes**  
 maní, miel, aceite vegetal, azúcar, sal.  
 Pone en la refrigeradora.  
 Bueno hasta  
 Hecho en  
 Para más información sobre su bien-estar, visita **Soluciones Comunitarias** [www.solucionescomunitarias.com](http://www.solucionescomunitarias.com)  
 (502)7832-6345

**Mantequilla de Maní**  
**Más Mani**  
 ¡por favor!  
 100% natural

**Recomendaciones**  
 1. Sandwich de mantequilla de maní y jalea

2. Lo come con frutas y verduras (manzanas, bananos, zanahorias, apios...), pan de francés o tortillas

3. Mezcla la mantequilla de maní con helados o galletas

**Para su bienestar**  
 bocado sobroso y SALUDABLE

**Peanut Butter Business Proposal**

**DESIRED OUTCOMES**

- the creation of jobs and income for the otherwise unemployed local people
- the introduction of a low-price, high quality, and nutritious snack
- the generation of profit for Solcom's Centro Explorativo

**RESEARCH AND OBSERVATIONS**

**FACTS AND CONCERNS**

- PB definitely has a high nutritious value: contains protein, folic acid (which may reduce birth defects), and unsaturated fats
  - However, in Guatemala specifically, PB does not fill a nutrition gap since it provides pretty much the same nutrients as frijoles; it provides an alternative

- The biggest hurdle in PB production is contamination/food poisoning
  - Salmonella survives in fatty/oily environments (i.e. a jar of PB) for months
    - Contamination occurs through water, so one solution would be having an entirely dry environment in creating the PB
    - However, there is also moisture present in peanuts naturally, and the only solution to that would be to achieve the ideal 1% moisture level by roasting for 30 minutes at 350°C (not really plausible for rural entrepreneurs)
  - “The rural processed peanut butter [in Zimbabwe]... showed higher levels of E-Coli and Salmonella.” (Source: *Raising rural family incomes through improved peanut butter processing* <http://www.research4development.info/SearchResearchDatabase.asp?ProjectID=2269>)
    - This PB project in rural Zimbabwe was pushed forth by two NGOs, ITDP and ZOPP
- Another hurdle in PB production is the shelf life
  - Food Network and other sources estimate the shelf life of PB to be about 2 weeks, and up to a couple of months with refrigeration and air-tight sealing
  - Additionally, a problem with home-made PB is that the oil separates and floats to the top, resulting in a layered and visually unappealing product

## ANALYSIS AND RECOMMENDATIONS

- Given the health risks associated with home-made PB, this project cannot be a mass produced, long-term product
- One possible solution to the preservation issue would be emulsifiers (monoglyceride) → more research still needs to be done
- Address the preservation problem by using smaller jars
- More research on preservatives and negative health effects of organic PB is needed
- Look into plastic jars as a lower-priced alternative to glass jars

## COST ANALYSIS

- Salt: 1 bag = 400 g = 70 jars (8 pinches/ jar) = 1 Q  
**Cost:** .0143Q/jar
  - Sugar: 1 bag = 2.5 kg = 52 jars (3 tablespoon/ jar) = 12 Q  
**Cost:** .231Q/ jar
  - Honey: 1 bottle = 340 g = 21 jars (6 squirts/ jar) = 10 Q  
**Cost:** .048 Q/ jar
  - Oil: 1 bottle = 900 ml = (3 teaspoon- 4 capsful / jar) = 14 Q  
1ml = .57 g (however density of oil is different than water, so cannot calculate exact cost per jar)  
**Cost:** near zero
  - Jar: *Unknown*
  - Peanut: 1 lb = 4 cups full/ jar) = 6Q  
**Cost:** 6Q/ jar
- 

**Total Cost of Raw Material:** around 10 Q

~380Q for Food Processor at Bodegona

~280-800Q for a Blender

## PROFIT ANALYSIS

Selling Price:	20 Q
Raw Material Cost: --	10Q
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Profit:	10Q
	(5 for PB entrepreneur + 5 for Centro Explorative)

## HOW TO MAKE PEANUT BUTTER?

### En español:

#### Ingredientes Para Una Porción de Mantequilla de Maní (Dos Porciones Para Una Botella)

- 1/2 libra de manillas
- 1 1/2 cucharas de servir de azúcar
- 4 pizcas de sal
- 1/2 cucharas de servir de aceite vegetal (marca- El Faro).
- 1 cucharas de servir de miel

#### Instrucciones Para Hacer La Mantequilla De Maní:

1. Cocina la media libra de manillas en un sartén para aproximadamente dos minutos o hasta las manillas son un poco morenas y tiene un olor fuerte.
2. Mientras las manillas están cocinando pon el sal, azúcar, aceite, y miel en la licuadora.
3. Entonces cuando las manillas están cocinadas mezcla éstas con lo demás en la licuadora
4. Enciende el licuado y mezcla hasta todo es cremoso.

Nota: Es posible que cada veinte o treinta segundos usted necesite apagar la licuadora, y mezcla todo con una cuchara para estar seguro que todos están mezclando.

\*\* Producción: 5 botellas/ hora

- Ahorra lo demás de la mantequilla de maní en una otra botella para probar durante el día (campaña) de vender.

Tres porciones puede llenar a dos botellas.

### In English:

#### Ingredients for One Serving of Peanut Butter (Two Servings Make One Jar)

- 1/2 pound of peanuts
- 1 1/2 tablespoons of sugar
- 4 pinches of salt
- 1/2 a tablespoon of vegetable oil
- 1 tablespoon of honey

#### Instructions for Making Peanut Butter:

1. Pan roast the half pound of peanuts for approximately two minutes, or until the peanuts are golden brown and begin give off a rich aroma.
2. While the peanuts are cooking, measure out the salt, sugar, vegetable oil and honey into the blender.
3. Then, when the peanuts are finished roasting, mix them with the rest of the ingredients in the blender.
4. Turn on the blender and mix all the ingredients until creamy.

Note: It is possible that every 20 or 30 seconds you are going to need to shut off the blender and mix the peanut butter with a spoon to make sure that all the ingredients are mixed well.

\*\* production rate: 5 jars/ hour

-there will be a bit extra; approximately 3 servings fill up 2 jars. Keep the extra to fill up a sample jar for campaign.

### PEANUT BUTTER: NEBAJ

#### PEANUT BUTTER MARKET IN NEBAJ

##### EL DESCANSO TESTING- POSITIVE REACTION

We gave out samples in El Descanso. The waiters and the customers liked the taste and had positive reactions to our product.

##### CENTRO EXPLORATIVO CHARLA- POSITIVE REACTION

At the Centro Explorativo, we gave a charla about Peanut Butter to the kids. After introducing ourselves with a skit and giving out Peanut Butter samples, the kids demonstrated great interest in this new project. We subsequently showed the kids how to make the peanut butter and spoke with the teachers about the PB project.

What we learned?

- Most families have blenders at home. Solcom will not need to invest in blenders in this project
- Guatemalans eat mostly frijoles and bread for snacks. They don't really have the concept of eating snacks here.
- Guatemalan kids like the PB taste. There is definitely a market out there for peanut butter if we promote it the right way.
- People might be initially skeptical about the product because of its color; however, after eating samples, they are most likely going to change their minds about the product.
- The teachers at Centro Explorativo seemed to be VERY interested in this peanut butter project. This is a good sign because it shows that they will be willing to take ownership of this project if given the opportunity.

### XOCUAY CAMPAIGN TEST SALE- POSITIVE REACTION

At the Xocuay campaign, we offered PB samples. We gave out samples mostly to kids. Many of them kept coming back for more. This reinforces the reaction that we've received at the Centro Explorativo. Guatemalan kids definitely accept and like the taste of the peanut butter. Some of the kids brought their parents in hopes of buying the product. The parents tried some and seemed to like the taste as well. In the end, we sold 2 jars, and Ana, the assessor, bought one as well.

### HOMESTAY DISCUSSION- POSITIVE REACTION

After speaking to our homestays about the peanut butter, we've received positive reaction on this product. Hannah and Lauren's families even willingly bought jars of peanut butter. Another 2 jars are sold to the homestay families.

## **HOW TO SELL? (Nebaj)**

### **Initial Steps Options for the Centro Explorativo:**

- Centro Explorativo Teen "PB Entrepreneurs"
  1. Train the Centro Explorativo's teachers how to make peanut butter
  2. Give a charla to the older kids (15+) in the Centro Explorativo. In the charla, include information on the health benefits of PB and on how to make PB.
  3. The Teen "PB Entrepreneurs" would make the PB at home since the majority of family have blenders at home. The Teen "PB Entrepreneurs" would subsequently sell the PB door to door in La Pista.
  4. A portion of the profit made will return to the Centro Explorativo for education purposes. (see Profit Analysis)
- Centro Explorativo: Teachers + Kids + Parents
  1. Train the Centro Explorativo's teachers how to make peanut butter.
  2. Since the teachers communicate monthly with the parents about the Centro's group activity, have the teachers organize a "Peanut Butter Day." On PB Day, the teachers will talk to the parents about this new PB project, and how they can potentially become entrepreneurs in this product. Depending on the parents the reactions, the teachers can train the parents on how to make the PB the day of or organize another day.
  3. Why train the parents? Because many of the kids are too young to become PB entrepreneurs on their own. However, the process of making peanut butter is very easy, and they can definitely make the peanut butter and help their parents (who are often probably too busy to spend their time to make the PB) in this PB entrepreneurial business.
  4. These Parent "PB Entrepreneurs" will make the PB at home since most have blenders at home. The children can help their parents sell the product door to door in La Pista.
  5. A portion of the profit made will return to the Centro Explorativo for education purposes. (see Profit Analysis)
- Centro Explorativo: Teachers + kids and parents + teen entrepreneurs
  1. Combine option 1 and 2 from above. Have the teachers involve both little kids with their parents and the older teens.

Depending on the success of these entrepreneurs, Solcom can decide what steps to take next to expand the business.

## **Business Plan Options (Nebaj)**

- Sell peanuts and jar+ label as a package (The Package Deal)

- Since it's hard to buy peanuts in Nebaj, Solcom can make profit from this business through selling peanuts. Sugar, salt, honey, and vegetable oil are all available in the market. Therefore, the PB entrepreneurs can easily buy these materials on their own. After training the PB entrepreneurs, Solcom will only provide the peanuts. For every pound of peanuts, Solcom will provide a jar with the label on it as a package deal. The jar+label+peanuts package will compel the PB entrepreneurs to buy from Solcom because of the brand name.
- Sell for how much (1 lb of peanuts w/ jar + label)? 13Q
  - Market price/ jar = 20Q
  - Cost of 1 lb of peanuts (6Q) + cost of jar/label (2Q)\*\*+ Solcom Profit (5Q) = 13 Q
  - PB Entrepreneur Profit = Market price (20) – Package (13Q)= 7Q (2Q for other raw materials--sugar, salt, honey, oil—and 5Q profit)
  - \*\*Assumption: cost of jar+label= 2Q (need to verify)
- ADVANTAGES
  - Ease of preparation of package
  - Entrepreneurs can find the best prices for the other materials and increase efficiency of/decrease cost of production
- PROBLEMS
  - Quality control of the peanut butter
  - Possible damage to Solcom's brand name—Más Maní, por favor—because of the lack of quality control
- Possible Solutions:
  - SOLCOM PB ENTREPRENEUR CERTIFICATION: Before they become official “PB Entrepreneurs”, they have to be tested on the quality of their peanut butter production. This will ensure that the PB entrepreneurs can make Solcom style PB.
  - CONTINUAL QUALITY CONTROL: Bimonthly or trimonthly, PB entrepreneurs' peanut butter need to be examined again for quality. In the beginning, the teachers at Centro Explorativo can take on this task since most of the PB entrepreneurs will be based in La Pista and since the teachers see/ communicate with the PB entrepreneurs on a regular basis.
- Sell all raw materials (Business-in-a-Box)
  - This approach provides everything necessary for production, sans blender. Materials in the box include: peanuts, jar + label + glue, oil, salt, sugar, and honey.
  - All materials are carefully measured so that there is enough of everything for the production of exactly 10 jars of peanut butter.
  - Price of box: 15Q
    - Market price/ jar = 20Q
    - Cost of materials in box (10Q) + Solcom Profit (5Q) = 15 Q
    - PB Entrepreneur Profit = Market price (20) – Package (15Q)= 5Q
  - ADVANTAGES
    - More quality control:
      - All ingredients come from the same place and are the same brands
      - Measurement is not an issue as all materials are pre-measured
  - PROBLEMS
    - A middleman is necessary to measure out all the materials and buy the extra ingredients → assembly costs may be higher
  - Possible Solution:
    - Have the teachers and children at the Centro put together the packages to cut down on this middleman cost.
- Centro Explorativo, ak.a. The Peanut Factory
  - In this approach, the teachers (and possibly children at the Centro?) will be the sole manufacturers of the peanut butter.
  - The teachers and children will also be in charge of selling the peanut butter
    - Additionally, if the teachers choose to, they can commission teens at the Centro to act as PB salespersons
    - The teachers can organize their own mini-campaigns in order to sell the PB within the 2-3 week shelf life
  - Price of materials: 10Q
    - Market price/ jar = 20Q

La Pista Profit = Market price/jar (20Q) – cost of materials (10Q) = **10Q**.

La Pista Profit with teen salespersons = Market price/jar (20Q) – cost of materials (10Q) – commission/jar (3Q) = **7Q**.

- ADVANTAGES
  - Absolute quality control:
    - All ingredients come from the same place and are the same brands
    - All jars of peanut butter are made by the same people so there is less variation of human error
  - Highest profit margin for the Centro Explorativo
- PROBLEMS
  - Production may be time-consuming for the teachers at the Centro → opportunity cost of the labor may be too high
  - SolCom as an organization does not profit from this arrangement as all proceeds go straight to the Centro
  - Expansion opportunities are less rich and skills to make PB are localized
- Possible Solution:
  - Have the teachers give *charlas* to parents on how to make PB at home
  - As an alternative, SolCom may profit by charging extra for material costs (cutting into the profits of the Centro)
  - Teachers may hire full or part-time peanut butter makers? (labors costs need to be further analyzed).

## **PEANUT BUTTER: ANTIGUA**

### **PEANUT BUTTER MARKET IN ANTIGUA**

#### SANTA MARIA DE JESUS

At this campaign, our initial location did not facilitate the sale of peanut butter – we were on a small side street and although many people tried samples of our PB and gave positive feedback, not many people purchased it. Later, we moved our PB stand to the market and found a much more receptive audience there, selling 4 bottles.

What we learned?

- It is far easier to sell PB in a market, where people have money and intent to purchase food
- Samples are a good way to attract people and sell the product
- Having a large sign was an efficient way to distribute information to lots of people
- A good target market would be traveling tourists, who really need a healthy snack and have the money to spend on it
- Mothers with children are a good target if we emphasize the ‘health’ aspect
- 20Q is a good price for the PB (market the price as 22Q for the cultural emphasis on bargaining, i.e. in markets)

#### SAN FELIPE DE JESUS

At this campaign, we were centrally located in the city’s auxiliatura, which was a fantastic location. We set up our peanut butter stand outside and offered samples to not only the people coming out of the eye exams but also to the people passing by. Since San Felipe was a pretty modern town, a lot of people showed interest and did not hesitate to buy the peanut butter. We didn’t need to try very hard to sell the 4 bottles that we had. People asked us to buy it rather than the other way around.

What we learned?

- There’s a greater market for peanut butter in a more modern town even though the nutritious need might not be as high
- Laying out premade samples on a plate was convenient and helpful. People were more willing to try the peanut butter if they were laid out on a plate (more pleasing).
- Approaching people and offering sample will generate more sales
- Guatemalans DEFINITELY love peanut butter. There’s a market there!

## **HOW TO SELL? (Antigua)**

### ASESOR MODEL

The asesores near and in Antigua can sell peanut butter at their campaign sites. They will sell the peanut butter for 20Q. For profit, the assessores will earn 5Q per jar, and Solcom's Centro Explorativo will earn another 5Q.

- *Rural Campaign Site Suggestions*

- Make 3 jars of peanut butter via **The Package Deal** plan (1 for sample\*\* and 2 for sale) because there's less demand for jars of peanut butter in rural areas due to money concerns. This will prevent the asesores from losing money as a result of overproduction.
- Instead, utilize the **BUSINESS-IN-A-BOX** (see Nebaj section) approach in order to spread peanut butter recipe, information, and production technology.
  - Alternate Profit Analysis:
  - Assessor price of box: 13Q  
Sale price of box: 15Q  
Cost of materials in box (10Q) + Solcom Profit (3Q) = 13 Q  
PB Entrepreneur Profit = Market price (15) – Package (13Q) = **2Q**

\*\*The assessor shouldn't worry about the cost of the sample jar cutting into their profits. It can be filled with the extra PB produced from the recipe, which allows for some surplus.

- *Urban Campaign Site Suggestions*

- Make 6 jars of peanut butter via **The Package Deal** plan (1 for sample and 5 for sale) because there's a good demand for jars of peanut butter in urban areas, where it's easier for families to afford the 20Q price.
- Our assumption is that **BUSINESS-IN-A-BOX** may not work as well in an urban setting because of the extra labor input; pilot campaign needed to confirm this

- *Market Day Sales*

- (completely theoretical)
- Assessors can devote a day to solely selling PB in the market, on Market Day
- Make 10-20 jars of PB (depending on the Assessor's assessment of the market/interest; i.e. if there are many tourists, produce more) via **The Package Deal** plan (1 for sampling and 9-19 for sale)
- Set up a professional-looking stand to maximize perception of authenticity

- *Publicity*

- Always have a large poster to advertise the PB; this is especially helpful during campaigns, when the assessor may not have time to talk about the product. Suggestions for information on the poster:
  - Más Maní, Por Favor! Mantequilla de Maní
  - Saludable, deliciosa y barata
  - Comprálo ahora!
  - Solo 22Q
  - Pictures of peanuts
- Always have samples laid out nicely on a tray since the asesores will probably be too busy selling other products during campaigns
  - Have a dab of peanut butter on French bread, just enough for taste testing

## TOURISM MODEL

Antigua is a big tourist town, and tourists enjoy peanut butter. Having business plans that target towards tourists is beneficial to both the PB entrepreneurs and Solcom's Centro Explorativo.

- *Spanish Schools*

- **Peanut Butter Factory** model would work here, with SolCom Office being the factory. People at SolCom can make PB in their spare time and then set up partnerships with Spanish Schools in the area to sell it
- Price of materials: 10Q  
Market price/ jar = 20Q  
SolCom Office Profit = SolCom Price (15Q) – cost of materials (10Q) = **5Q**.  
Spanish School Profit = Market price/jar (20Q) – SolCom Price (15Q) = **5Q**.
- Alternatively, partnerships can be made with tourism offices or tiendas

## **Final Peanut Butter Recommendation**

- Use smaller jars
  - o Test cost efficiency
  - o Figure out the market for smaller jars
  - o Figure out how much to sell it for
- Research on the tourism market in Antigua and see if it's possible to incorporate Spanish Schools in the plan
- Research on consigning the peanut butter business to places (like El Portal) that need an additional source of income
  - o Maybe give a charla on the PB business to see their reaction
  - o Work out on maybe financing the blender to get them started
- Research on the health effects
- Have an assessor peanut butter trial and training session
- Develop a professional way to print and stick labels
- Analyze cost efficiency of switching to plastic jars