



INTRODUCTION

Mexico currently holds the no. 1 country with more obesity in the world that is and also the no. 1 cause of death in Mexico. 7 out of 10 adults and 1 in 3 children have overweight issues or are obese. 41% of these Mexicans have no health insurance or no access to a health facility.

The Mexican government has tried various things to try to reduce this issue by increasing tax prices on sodas, trying to persuade people to exercise by giving out free subway tickets in exchange of sit ups and reduce the amount of junk food commercials during kids show times. However, healthy food is not accessible for low-income people living on a budget since prices for fruits and vegetables have risen 150% in the last two years and unhealthy fast food prices are more affordable.

30 years ago, the Mexican diet used to be healthy. We ate vegetables, fruits and proteins everything was accessible and cheap unlike today. We are conscious about the problem we have but we don't understand how serious it really is.

There is a saying in Mexico "a falta de pan, tortillas". Literally means that when there is no bread eat tortillas. But the deeper meaning of this phrase is, basically eat whatever is available to you. Whatever is obtainable. And for low-income Mexicans living on a tight budget and with limited amount of time, the only thing available now is cheap processed and unhealthy food.

Through ethnographic interviews, observations, and prototypes I have found that low-income Mexicans believe that they have not acquired the "healthy food taste" while growing up and therefore are not used to eating or cooking healthy meals. This is where much of the problem lies.

"part of the Mexican diet includes vitamin T. Tacos, tostadas, tortas and tamales, on which much of the problem lies."

To understand what the government is doing to help lower obesity rates in Mexico city, I interviewed Gladys Buitron, a worker at the Secretary of Public Health. Even though I got to learn a lot about what is being done through out the years, it seemed that she was confused about many of the aspects I brought up. She kept contradicting herself in some questions. When asked about how the government is creating awareness about obesity she said that there was a lot of advertising in streets and t.v. that were very effective. However, in another question when I asked about the increment in taxes for sugared drinks, she said that she believed it was a good strategy but the ad campaigns educating people about the harms these could make should be on for a long amount of period since ad campaigns don't make an effect until 5-10 years later.

Not only because of these questions but because of a whole interview full of holes, uncertainties and contradictions, made me believe that not even the health sector knew what they are doing to prevent these diseases to more Mexicans.

research





Above are some quotes from people about eating on street stalls. With this knowledge my initial goal for thesis was to:

Create a way for for low-income Mexicans to acquire healthier and better eating habits.

research





First Prototype: Fast food stall

After learning that 43% of Mexicans eat in fast food street stalls I decided that might be a very interesting approach for this problem. There are no healthy fast food street stalls in Mexico and I wanted to see what would happen if there where.

I prototyped a fast food street stall to provide company/construction workers a healthier substitution to the food they eat on a regular basis. Tacos. Company workers work long hours a day, need a high caloric meal to have energy to get work done, get paid poorly and have limited food options as well as a limited amount of time to eat.

After hiring someone to help me recreate a street stall menu with less salt, less cholesterol and healthier meat types for tacos, the prototype was unsuccessful. The workers that ate at the stall said that the food was too gourmet. When asked what too gourmet meant for them I realized that it meant that it was healthy. These people haven't acquired a healthy taste since they have been accustomed from an early age to eat unhealthy. They had to put tons of salsa to their tacos in order to give it some flavour. A flavour they where familiar with.

“The vegan pastor tacos and the chicken chorizo didn't really have much flavor and we are not used to this type of “healthy” food.”

After this feedback I kept thinking about the phrase “too gourmet”. Mi biggest learning from this failed prototype was that people living on a tight budget, gourmet food really means healthy food. Because they are not accustomed to eating healthy, they consider a lean meal as gourmet just because they are used to eating really greasy and rich food that in the end makes them feel full and heavy.

People from low-income backgrounds sometimes don't have the opportunity to try new cuisines or different flavours due to price. They haven't acquired this “gourmet” taste because tacos and junk food is more accessible. When they have been habituated with greasy unhealthy food for most their life, they really notice a huge difference and challenge when their diet changes and don't know how to savour good healthy food.

analysis



Second and third prototype: Meal box & Cooking class

The phrase “too gourmet” stuck with me for a while. To address the learnings from my past prototype, I decided to do my second experiment. The things I observed from my first prototype was that people don't know how to cook healthy food that is tasty for them. Most low-income Mexicans are under the impression that healthy food is gourmet, tasteless, and lacking richness in flavor.

For this reason, I created a 2 meal; make it yourself box for low-income mothers. I decided to explore a new target audience because mothers and wives, are the ones the usually cook dinner and ultimately are the dinner decision makers. They are the ones who have the final word of what they buy in the grocery store and what they feed their family. By getting to moms I was going to affect more people; Children and husbands. The long-term idea for this box was to make it a consumer product that would provide healthy, fast, cheap, portion based food addressing the problem that many of the people from the last prototype had.



The **objective** for this second prototype was to learn about mother's cooking methods and food decision making. Many are constantly in a hurry and end up buying pre-cooked meals in a market or street stall. The **goal** I set up for this second prototype was to get them experience tasty, rich, healthy food and hopefully get them interested in trying more healthy recipes that can be done in a short amount of time to fit in their busy lives. My **hypothesis** was that by having them experience healthy recipes then they might re-create it in future meals or even be inspired to try new recipes instead of cooking the same things they usually do.

The box had a positive impact on two women I tried it with. They were between the age of 30-40 with a toddler and husband at home. They really enjoyed the variety of food and recipes and thought that it was very accessible to make during the busy day they have. The women also thought they could benefit from having something like this not everyday but at least once or twice a week to help them out in their busy lives.

However, many wished to add some flavours they were familiar with such as seasoning or add/subtract ingredients to give food a special unique touch. Their own touch.

At that same time, I learned that this boxed meal model already exists in the USA and wanted to further challenge myself to find another solution for my problem.



In the box prototype I learned that it is very important in the Mexican culture to add your own flavour to each meal you make. so I wanted to add this feature in my next prototype and make mothers feel like they have the freedom to express themselves in their cooking. I decided to invite these two women I prototyped with plus one more to join me for a couple of cooking classes.

The **objective** for these classes was to see how much they would personalize a recipe given to them and how they would utilize or react to ingredients they have never cooked before such as coconut oil, amaranth tortillas and quinoa. This way, they will still have the opportunity to cook something healthy but at the same time have the liberty to add or subtract any seasoning or flavour they are used to.

The ultimate **goal** for the class was to cook a dish they were already familiar with, such as tacos, but using better healthier ingredients to show them other healthy alternatives to cooking the food they already make at home on a regular basis. Both cooking classes were facilitated by a professional chef who taught them about the flavour and use of these new ingredients.

While each person had the liberty to use the ingredients as much or as little as they pleased, the chef gave alternatives to healthier cooking and made the taco dish healthy.

As we all finished each cooking class, we all tasted and commented on everyone's dish. We compared tastes and really got to experiment the difference in seasoning and preparation methods from a healthy and unhealthy dish. Some used too much salt, some didn't use salt, some had a lot of grease etc. They also had the opportunity to try the healthy version made by the chef.

They were surprised to learn how by just changing one ingredient they could make a big difference in their health and how this tiny substitution could also make the dish taste good. The chef also gave them an overview of the amount of grease, fat and unhealthy ingredients they were ingesting when adding oil, salt, butter, or other every-day ingredients.

By being mothers, these women felt motivated to keep trying to replace some of the ingredients they cook with some of the ingredients they learned about in the cooking class. I kept following up by sending them recipes that utilized healthier ingredients. One of the women kept trying some of the recipes I sent and kept exploring on her own by looking for more recipes online.

The classes received a positive feedback and began an interesting introduction to healthier alternatives. Unfortunately I didn't see much of a future for this prototype since these ingredients are still somewhat hard to find in a common grocery store and are somewhat expensive for the target audience I was trying to help.



analysis



Fourth Prototype: Inspired by Carolina

While I was prototyping in Mexico I went to visit my previous co-workers at a kindergarten I used to work in. A girl called Carolina, who was in my class used to bring cookies and chocolate milk for lunch every single day for a year. She would even ask me if she could trade in her cookies with someone else for some chicken nuggets or even pasta. Whatever “real” food her friends had that day.

After noticing this from a few children, the staff was asked to talk to the parents and ask them to provide healthier food for their kids. I learned that a lot of the children in my class wouldn't even eat breakfast due to the early time in the morning they had to wake up for school and others ate fast pre-packed food on the way to school.

When I visited, I went up to Carolina's lunch box and surely saw, cookies and chocolate milk. I was always under the impression that children are obese or unhealthy because when given the option of eating healthy vs junk food, they would always choose junk. Carolina proved me wrong and this is why I decided to try my fourth prototype and trying to get to mothers motivated through their children.

The **objectives** for this prototype was to see if children had the power to motivate their mothers and get them to buy healthier food for them. I also wanted to understand if children were aware or even interested in eating healthy food.

For the next three days I kept coming back for an hour to do a little workshop about health and food with 4 year-old kids. We read the book “What's in my food” by Deborah Lynn Flores as an introduction about healthy food vs. unhealthy. We sorted different types of food, had a cooking class and in the end had an activity that proved my **hypothesis**; If children are provided with tasty healthy food then they will choose it over unhealthy.

For the last activity I brought different foods from home; Fruits, vegetables and protein. During their lunchtime, I placed all these healthy treats on a table and I told every kid that they were allowed to change whatever they wanted from their lunchbox with whatever I had brought.

I was impressed to see that the food most kids changed was things like Nutella sandwiches, cookies and chips for healthier food. After I left, the other teacher that helped me facilitate this prototype, told me that a few mothers had come up to her to express how their children were telling them at home when they weren't eating healthy and asking for things that were. I then talked to one of the mothers personally and she expressed to me how impacting it was to have her son complain about the food he was getting from her. She realized that she had been manipulated by easy packed lunches and forgot about the health of not only her child but of herself.



analysis

Stepping back

At this moment I had to step back and look at all the prototypes, insights, learning's and observations I had made so far to find a common thread to define a final goal.

All of the people I've been talking to and prototyping with are constantly in a hurry. Even children are being accustomed from an early age to eat on the go and eat unhealthy food. We are living in a world where we are always in a hurry and are starting to take for granted the little things that might not seem very important even though they are.

By looking at my research, insights and observations noticed a common thread in many of my hypothesis and outcomes from my prototypes. I then came up with the hypothesis that if all of them have limited time then they might not have a healthy breakfast or even a breakfast at all. I was right.



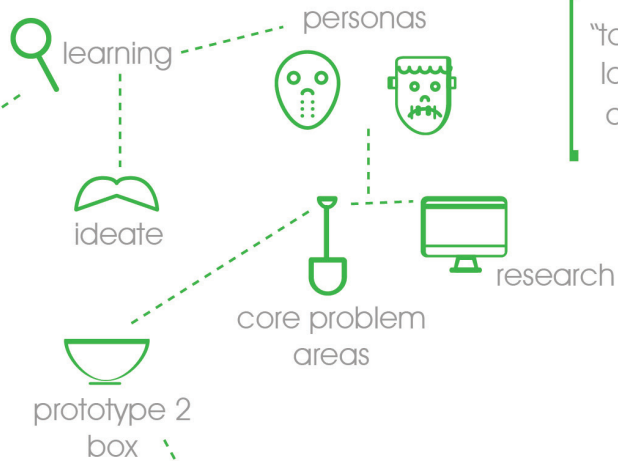
process map

obesity in mexico city

RESEARCH



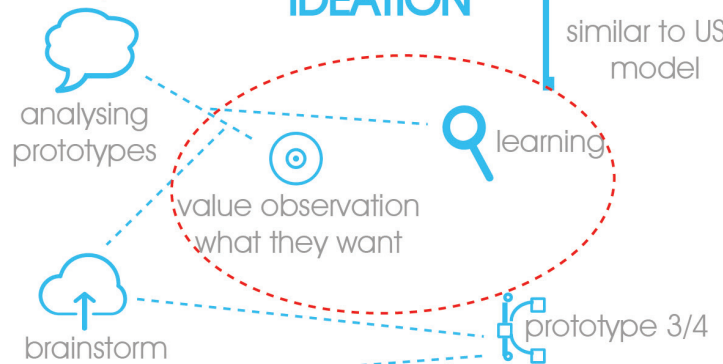
ANALYSIS



challenges

“too gourmet”
low income
accessibility

IDEATION



personalization
issue

fast/effective

similar to USA
model

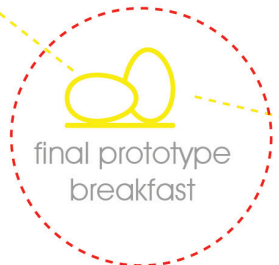
REFINEMENT



lack of breakfast

affects children

better
preformance



SOLUTION



Fifth Prototype: The most important meal

A mother's warning of "don't forget your breakfast" may feel outdated as we hurry along our busy adult lives but studies show that by having a healthier breakfast, you are most likely to make better and healthier decisions throughout the day as well as maintaining a healthy body weight. It has been found that eating breakfast every day was also a weight control strategy. This is where I saw the opportunity for my fifth and last prototype.

The **objective** for this prototype was to learn low-income Mexican workers

- Breakfast preparation methods
- Identify when it was easier to make it
- Understand the triggers that helped the best for the preparation of this
- Learn about their food choices throughout the day if they had a healthy breakfast.

I was originally focusing on low-income Mexican mothers but as I kept doing research and stepped back from all the prototypes, I found it more interesting and challenging to focus on low-income office workers since they have busier days and limited by time even more so than mothers.

Throughout user journey maps I discovered that most low income office workers wake up between 5 and 6 am and spend about 30-40 minutes to get ready for work and at least 1 hour to commute to work. This limited amount of time does not give them enough time to make breakfast.

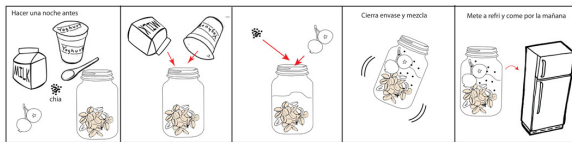
Most of them end up buying a piece of bread and coffee in a convenience store or street stall on their way to work or get something on the subway or before they start their commute. Needless to say, they snack unhealthy food throughout the day and make poor meal decisions during lunch and dinner time. The average Mexican spends a lot of money on eating unhealthy. They spend from 18.5% to 30% of their monthly salary. That is a lot of money and not a lot of eating options.



Having learned from previous prototypes that people are always in a hurry and with a tight budget, I created 5 healthy breakfast meals for 5 days that can be made in less than 5 minutes; this box is called “Comedere” which happens to be Latin meaning “food for the people”. A word that couldn’t describe better the problem I was trying to solve.

After showing this product to people they were unaware that a simple, healthy breakfast can be done in 5 minutes and it learned that it was easy to squeeze this time between their getting ready and their commute. Since these people are not used to making breakfast and usually just rush out the door in the morning, I provided a couple of objects along with their box to serve as triggers in order to remind them to make breakfast; A shower duck with the phrase “Lets have breakfast” and a banana key chain. The shower duck is meant to remind them about breakfast and implant that idea as soon as they woke up. The banana key chain is meant to remind them again about breakfast before they leave to work.

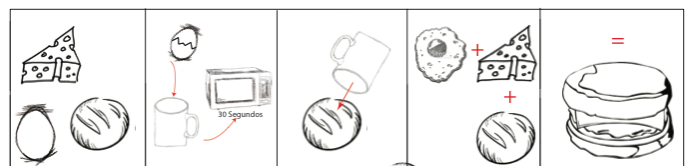
*All meals were accompanied by a simple illustration recipe instruction to show the effortlessness of making these meals.



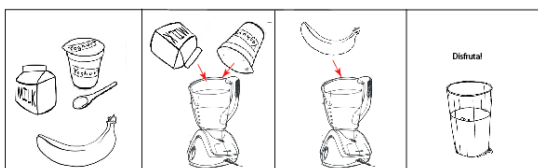
• Toast with a spread of black beans and avocado



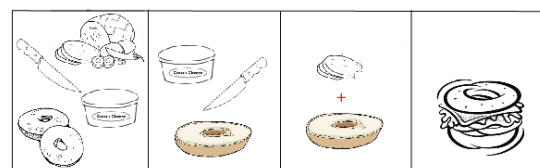
• English muffin with tomato and cheese



• Banana smoothie



• Turkey bagel

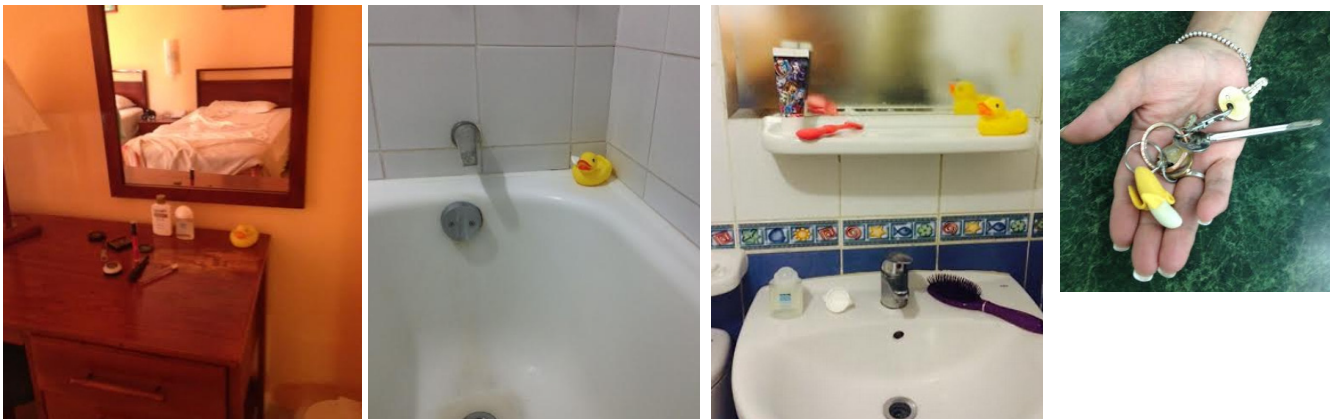
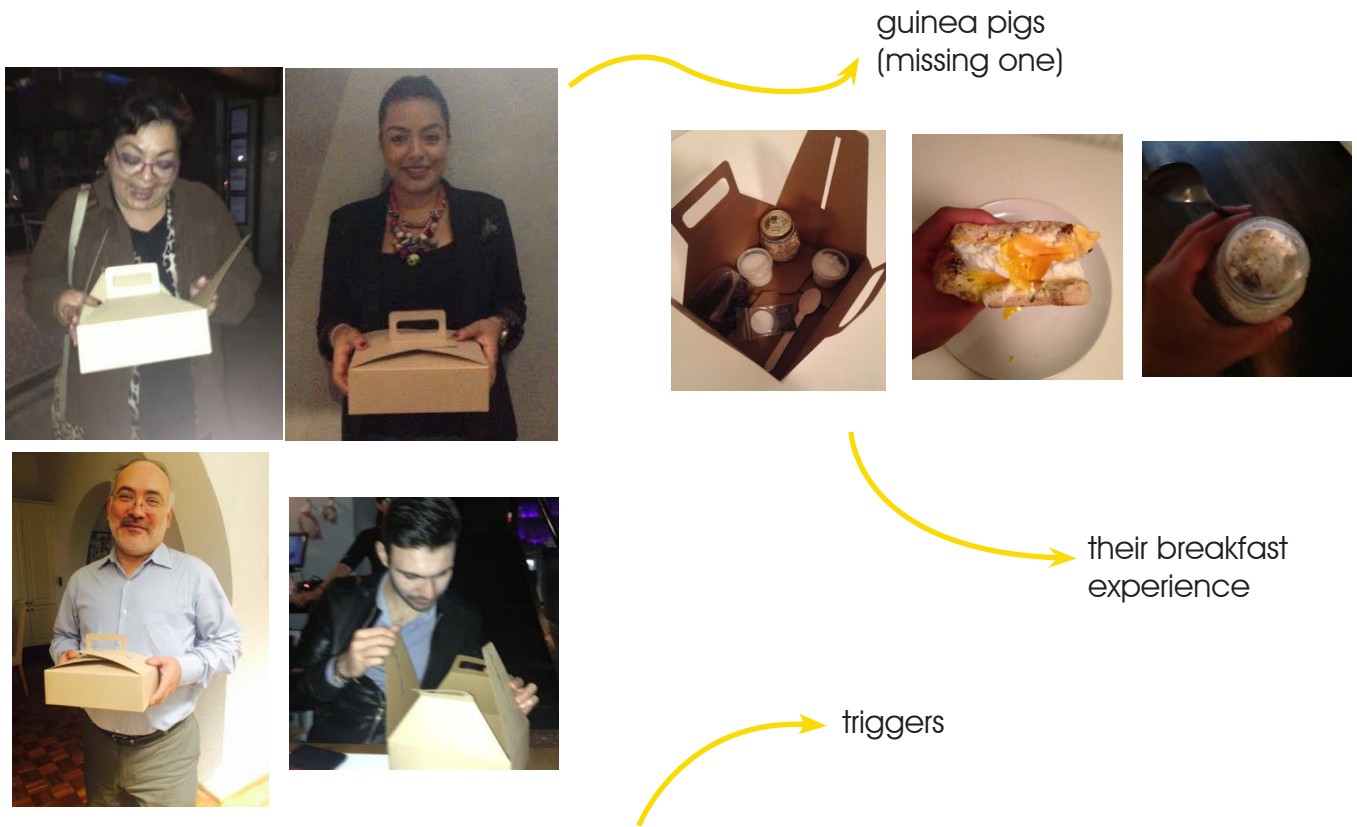




The 5 people that participated in this prototype had a positive response. They were all amazed about how fast and easy they could make a simple breakfast and how it didn't take away much of their morning, which is precious.

- People thought that having a healthier breakfast was like starting over.
- A clean slate. So throughout their day they snacked less junk food and made better decisions. They felt more energized and overall happy.

Following up on them, I learned that a couple of people kept making breakfast for the following week by being reminded by the triggers. Others used the mason jar provided to take fruit and/or vegetables to work. However, after some time they stopped because they kept forgetting to look for easy breakfast recipes, and going to get ingredients sometimes became a hassle in their busy lives.



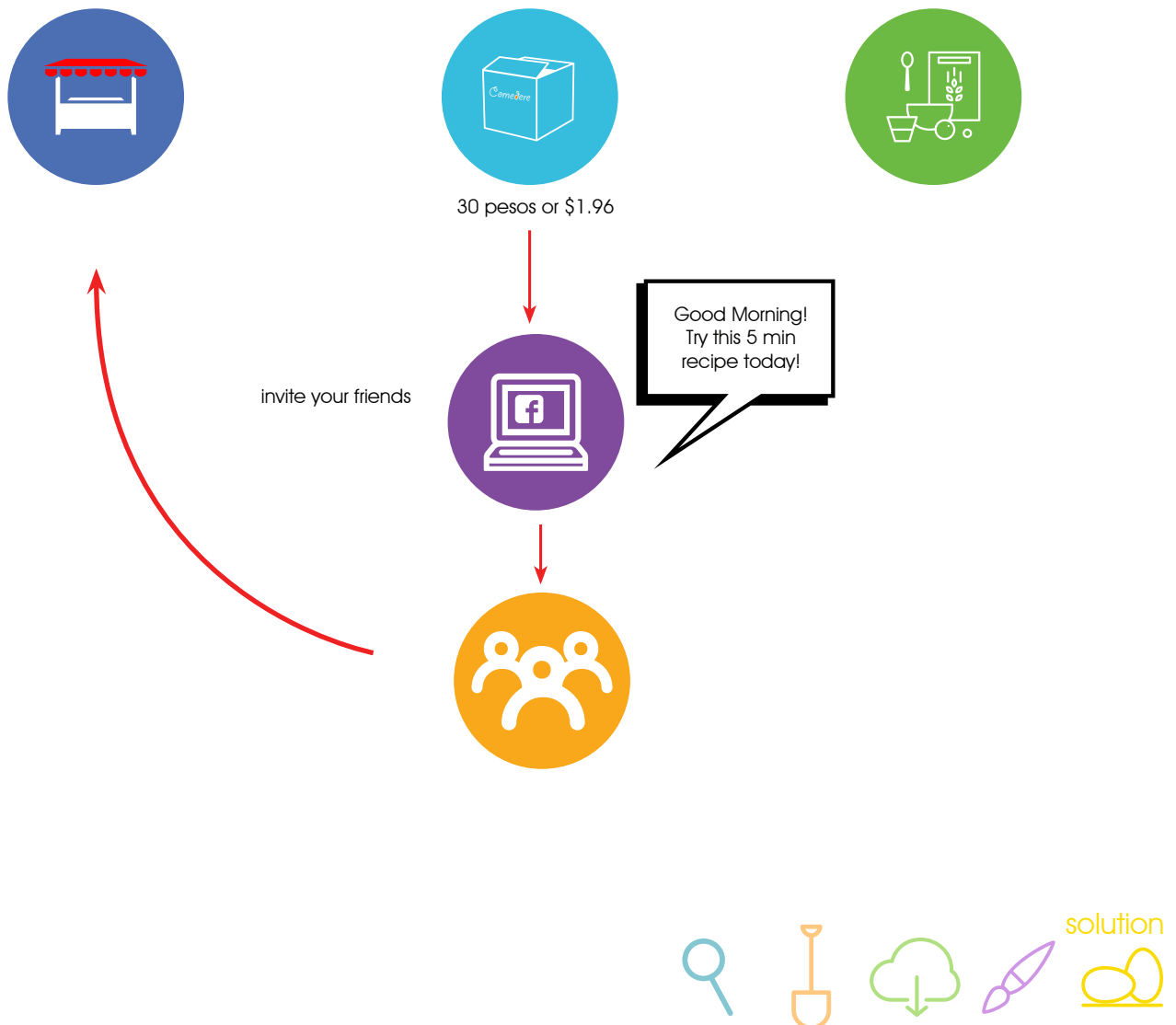
What this could be...

I believe that this could be the beginning of an interesting initiative. Where the breakfast box can be obtainable by anyone in the convenience store they frequent most. The boxes cost about the same amount of money a piece of bread a coffee cost and are fast and easy to make. I will also provide people with a online network where they could share recipes or questions with other people as well as getting reminders and motivations in the morning to start their day eating healthy.

During the summer, I will apply for a grant that hopefully will make this happen.

This product has a lot of potential because we are finally giving people the option to choose for themselves whether they want to keep eating unhealthy or not. But now they will have a choice. The breakfast box will not only provide healthy breakfasts for people and persuade them to make healthier decisions but also bring back the affordability of healthy ingredients, provide jobs to local markets and help people get closer to fighting obesity.

I am now creating a consumer product for for low-income Mexican workers with limited time, to acquire healthier and better eating habits through breakfasts.





THANK YOU

Special thanks to:
Gina, Mafe, Anna, Akshata, Haya and Tina
Despina Papadopoulos
My DSI 2015 Cohort
Cheryl Heller
Noah Ganeles
Karla Diaz Cano
Friends and Family
My guinea pigs
Mexico