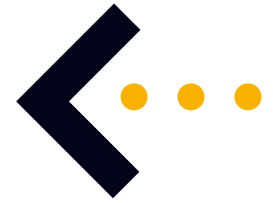




# Health Prevention Program



Among Middle-aged Asian  
in San Francisco

“An ounce of prevention  
is worth a pound of cure.”

— Benjamin Franklin



# Define the Problem



- + Many asian immigrants in San Francisco have low education.
- + They always work as manual labors for construction companies or restaurants.
- + They work over time, and have low awareness of healthy problems such as pain or ache in bones, joints and muscles.

# Interview

## Manos Coffee



The waitress has been in SF for more than 20 years, Mandarin and English are good enough for daily conversation.



Certainly feel tired after work, because of long time standing, rushing around to help customers, and holding heavy plates.



Love massage.

## Young's Café



Owner is also the main chef, who's over 50 years old, almost in the shop everyday .



Have problem in shoulder, elbow and wrist, sometimes feel pain, will use bandage if needed.



Think everyone has different gesture when cooking, he figured out the gesture by himself.

# Interview

- ✓ Know the importance of having medical insurance.
- ✓ Once had shoulder periarthritis for two years, and the doctor ask her to do certain workouts.
- ✓ Cookers in the Manos Coffee are around 40-50 years old.
- ✓ Very confidence about don't have any health issues.
- ✓ Believe they are still too young to have health issues.
- ✓ Don't need to lift heavy pots because the restaurant serves western food.
- ✓ If there is educational video about the right gesture to do things, the problem will be how to make people accept it.
- ✓ Seldom talk about health issues or how to cure or prevent the pain in joints.
- ✓ Most of people go to see the doctor after the problem occurs.
- ✓ The owner's wife has wrist pain because of holding heavy dishes.
- ✓ Use oil or have rest or try to carry less heavy things when the pain occur.
- ✓ Almost have no conscious about protecting herself away from health issues.

“Anthropologists seek out epiphanies through a sense of Vuja De.”

— *The Ten Faces of Innovation*



# Persona

- + Jason
- + 55 years old
- + Jason immigrated to America from China 30 years ago. He only graduated from middle school, and learned cooking from his uncle. Now he owns a restaurant in Chinatown. He is not only the owner but also the main chef. He works very hard, almost in the shop every day from morning to late in the night. He seldom cares about his health, and only goes to the doctor when problem occurs. He feels pain in arms sometime, but always ignores it and keeps working.



VISION:      ✕ ✕  
HEARING:    ✕  
MOBILITY:   ✕ ✕  
GRASP:      ✕ ✕ ✕  
BALANCE:   ✕ ✕  
STRENGTH:   ✕ ✕ ✕ ✕  
MEMORY:    ✕ ✕ ✕ ✕

# Persona

+ Judy

+ 52 years old

+ Judy is Jason's wife, who came to SF with her husband and run the restaurant business together. She is in the shop every day, help to do all the waitressing and cleaning work. She is a traditional Chinese woman who is diligent and sacrifices all herself to the family. She over protects her children and don't let them to help in the restaurant. Her youngest son is still studying in the college, and they have to pay for the tuition. She always has pain in the wrist; sometimes it's very serious that she couldn't even hold a dish. But she never goes to see the doctor, only use oil and rest to release the pain.



VISION:	×	×	×	
HEARING:	×	×		
MOBILITY:	×	×		
GRASP:	×	×	×	×
BALANCE:	×	×	×	
STRENGTH:	×	×	×	×
MEMORY:	×	×	×	



# Persona

- + Mike
- + 21 years old
- + Mike is the youngest son of Jason and Judy. He is studying in the city college and lives at home. When he doesn't have to go to school, he loves to play video games at home or hangout with friends. He often goes to his parents' shop to have dinner but never spend more time there.



VISION: ×  
HEARING: × ×  
MOBILITY: ×  
GRASP: ×  
BALANCE: × ×  
STRENGTH: ×  
MEMORY: × ×

# Persona

- + Li a Gu
- + 42 years old
- + Gui is a cooker working in Jason's restaurant. He immigrates here 20 years ago with his family. He couldn't speak English, so he can only find jobs in Chinatown. He lives a simple life and has very few friends. He considers himself still young and strong, so he never cares about his health. He earns a regular salary, so sometimes he is lazy and loaf around when the boss doesn't pay attention. He loves to eat and don't like to do exercise, so he's a bit overweight.



VISION:      × ×  
HEARING:    ×  
MOBILITY:   × ×  
GRASP:      × ×  
BALANCE:   × × ×  
STRENGTH:   ×  
MEMORY:    × × ×

# Persona



Susan



45 years old



Susan works at Jason's restaurant as a waitress. She is as diligent as Judy but more sophisticated. She always keeps herself busy in order to leave a good impression on her boss and expecting to get more tips and bonus. She has a low awareness of health problems until her shoulder began to hurt two years ago. Now she's working out regularly as told by the doctor.



VISION:	✕ ✕ ✕
HEARING:	✕ ✕ ✕
MOBILITY:	✕ ✕ ✕
GRASP:	✕ ✕ ✕ ✕
BALANCE:	✕ ✕
STRENGTH:	✕ ✕ ✕ ✕
MEMORY:	✕ ✕

# Persona



Mary



48 years old



Mary is a community doctor living in Chinatown. She always goes to Jason's restaurant and became friends with them. She can speak a little Cantonese which is just enough for daily conversation, so she seldom talks about her job and profession in the restaurant.



VISION:      × × × ×

HEARING:    × ×

MOBILITY:    × ×

GRASP:       × × ×

BALANCE:    × ×

STRENGTH:   × ×

MEMORY:     ×

# Daily Scenarios 8 Hour Activity Schedule

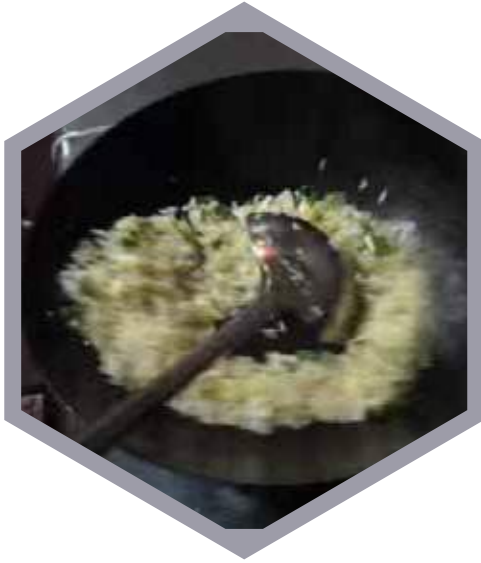
	Jason	Judy	Mike	Li a Gui	Susan	Mary
6:00-8:00 am	Wake up Prepare breakfast Watch morning news	Wake up Eat breakfast Do some cleaning at home	Asleep	Asleep	Wake up Have breakfast Take a walk in the community park Bump into and chat with Mary	Wake up Walk dog Bump into Susan and chat for a little while
8:00-10:00 am	Take bus to the restaurant Wait for fresh food material to arrive	Take bus to the restaurant Prepare for the opening	Get up Have the breakfast left by parents	Get up at 8:00 Prepare breakfast for the family Watch kitchen shows on TV at home	Do some stretching Send children to school	Go to work in the community clinic
10:00-12:00 am	Open the restaurant Cook noodle soup for the first customer Fry vegetables	Wash vegetables Clean tables Order chairs and menus	Go to school	Go to work in the restaurant Help to order tools in the kitchen Cut meat and vegetable, prepare for the daily use	Go to work in the restaurant Serve customer Give menu Take orders Serve water	Working in the community clinic
12:00-2:00 pm	Prepare 20 takeout food for a nearby company Cook the dishes ordered by customers in the restaurant Have to move quickly without the help of Gui who is delivering takeout	Collect heavy dishes from the table and take them to the kitchen	Studying at school	Help to prepare the takeout food Pack the takeout Deliver them to the customer	Clean the table after customers leave Prepare and organize flavorings on the tables	Take a noon break and continue working in the afternoon
2:00-4:00 pm	Take a short break after a large group of customers have gone Think about new dishes	Carry a heavy bucket of dishes downstairs for washing Sit on the chair to rest when there is no customers	Studying at school	Wash the pots in the kitchen Take a little rest in the gap	Wash the dishes Clean up the bathroom Organize tables and chairs Chat with co-workers	Working in the clinic
4:00-6:00 pm	Start to be busy Cook more complicated dishes than in the noon	Serve customer Pour water Bring food from the kitchen to the table	Studying at school	Busy in the kitchen Cut, fry, boil	Run to customer who is calling Chat with customers when doing things around	Ready to get off work Go to Jason's restaurant for dinner Chat with them
6:00-8:00 pm	More customers come, the restaurant is packed, some people even waiting for a table Become busier, have to do things quickly to serve the food in time Holding heavy pots all the time	Getting very busy Have to walk fast even run back and front Collect more dishes from big tables after a group of customers leave Feel pain in the wrist, can only bring dishes in a small amount	Take some friends to his parents' restaurant to have dinner His parents are too busy to chat with him	Have to do things fast, almost cut fingers when chopping vegetables	Start to feel pain in shoulders Want to have a rest, but it's too busy to stop	Get some takeout food for family and go back home
8:00-10:00 pm	Still busy, cooking for the last group of customers Clean up the kitchen Get ready for the shop to close	Bring all the dirty dishes to the wash place Carry heavy buckets downstairs Wash these dishes Double check, make everything is in order when closing the shop	Go home after eating Surf online Watch TV shows	Help to clean up the kitchen Organize all the tools	Serve the last group of customers Clean up tables Mop the floor Do some stretching when there is a break	Spend time with family
10:00-12:00 pm	Go back home Watch TV news Go to bed	Go back home Do some house work Go to bed	Stick on his laptop	Go back home Play some online game	Go back home Watch TV shows	Go to bed

# Most Challenging Activities



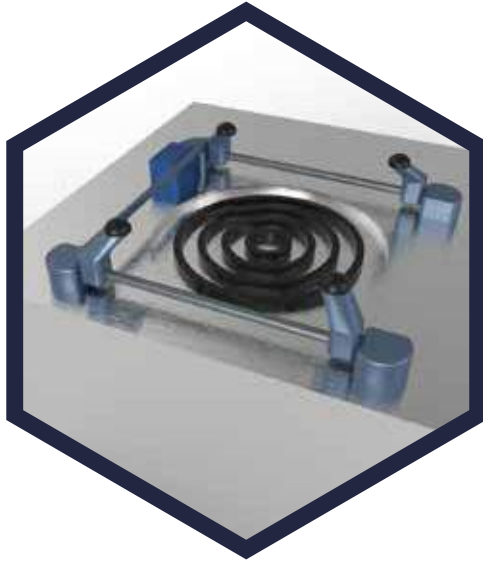
- + Holding heavy pots all the time in busy hours.
- + Carry heavy dishes.
- + Have to walk fast even run around when there are many customers.
- + Have to operate quickly in busy hours.
- + Don't have time to rest when feels tired.
- + Don't have the awareness of self-protection.

# Problem Statement



- + Chefs working in Chinese restaurants are easy to have occupational diseases in arms, because they have to lift heavy pots all the time when they are cooking fried dishes. It's a huge stress in arm, and when they are busy, they have no time to rest. They also lack the awareness of prevention.

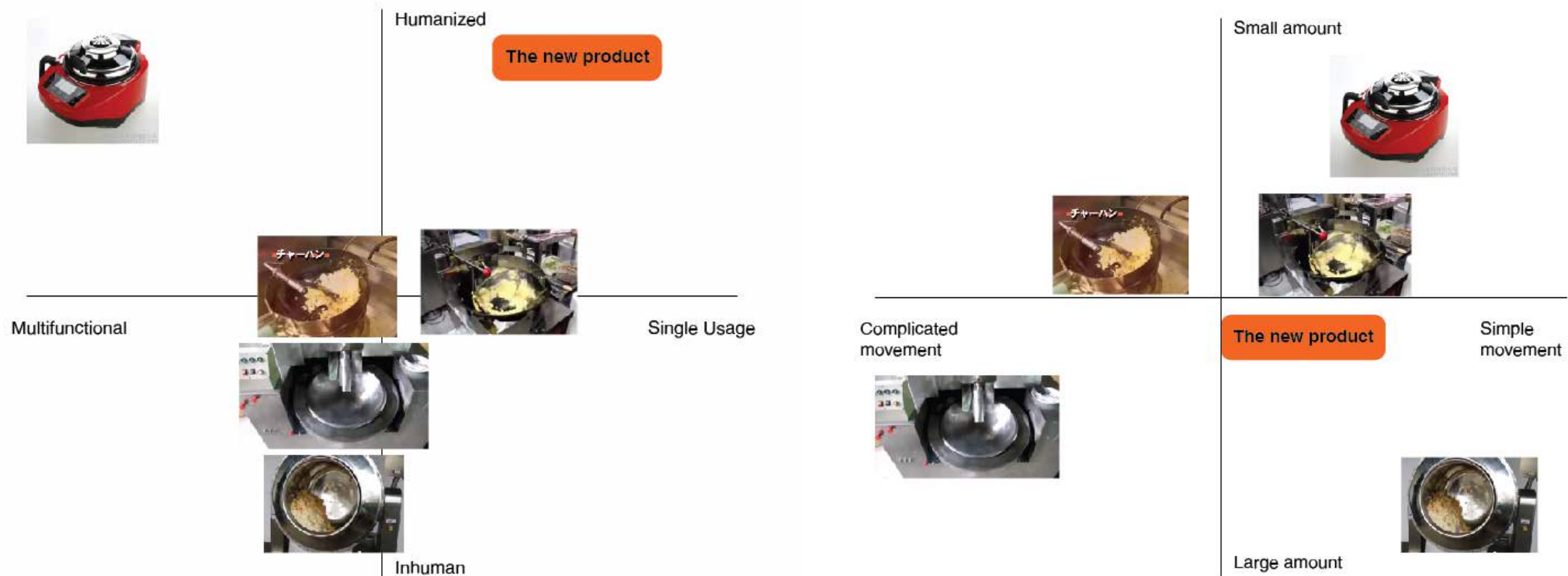
# Solution Statement



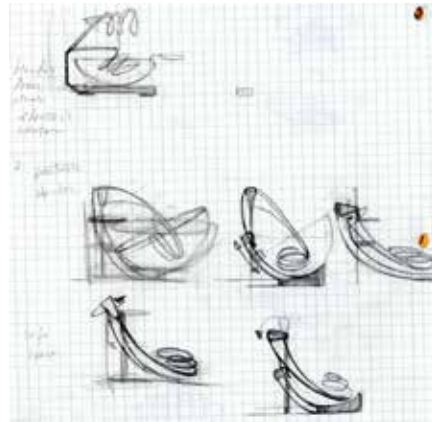
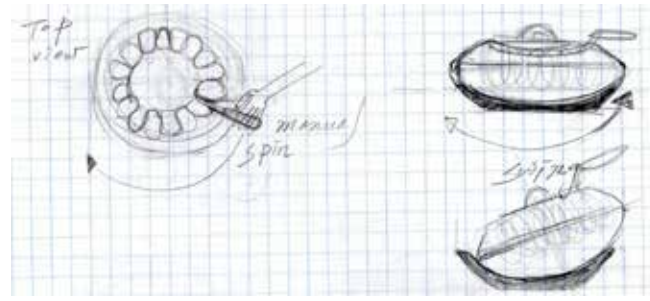
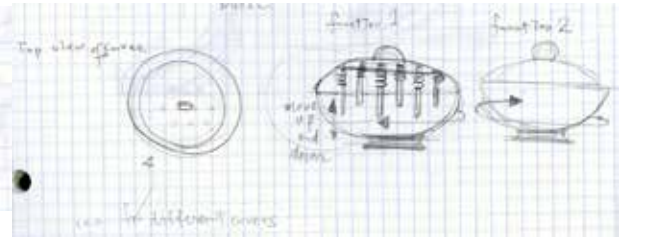
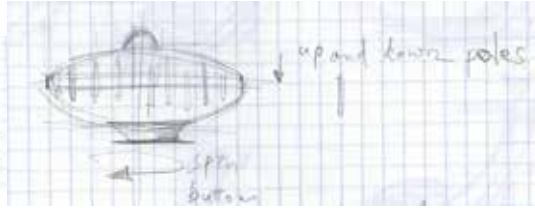
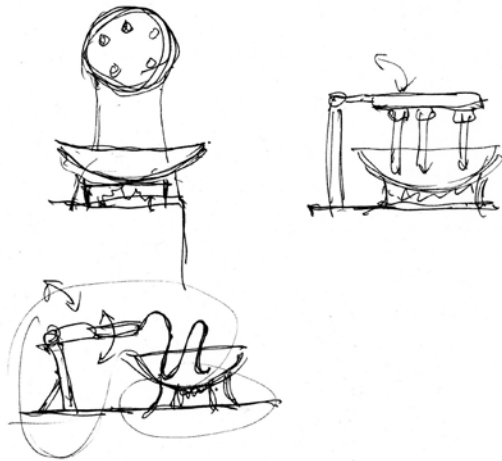
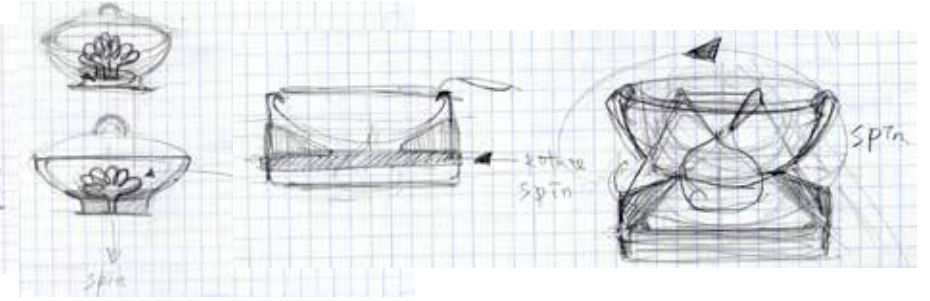
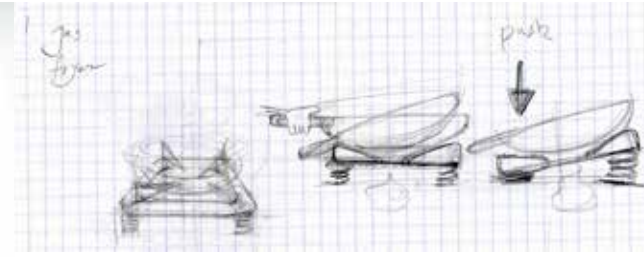
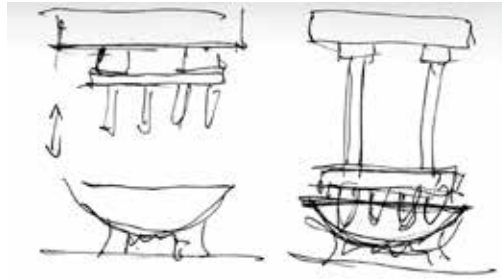
- ⊕ A labor saving device, that used in the kitchen. It will be simple, easy to use and single functional, which helps to save the labor from most intense step of cooking. And it will go with an advertising strategy which gives people the idea of “An ounce of prevention is worth a pound of cure.”



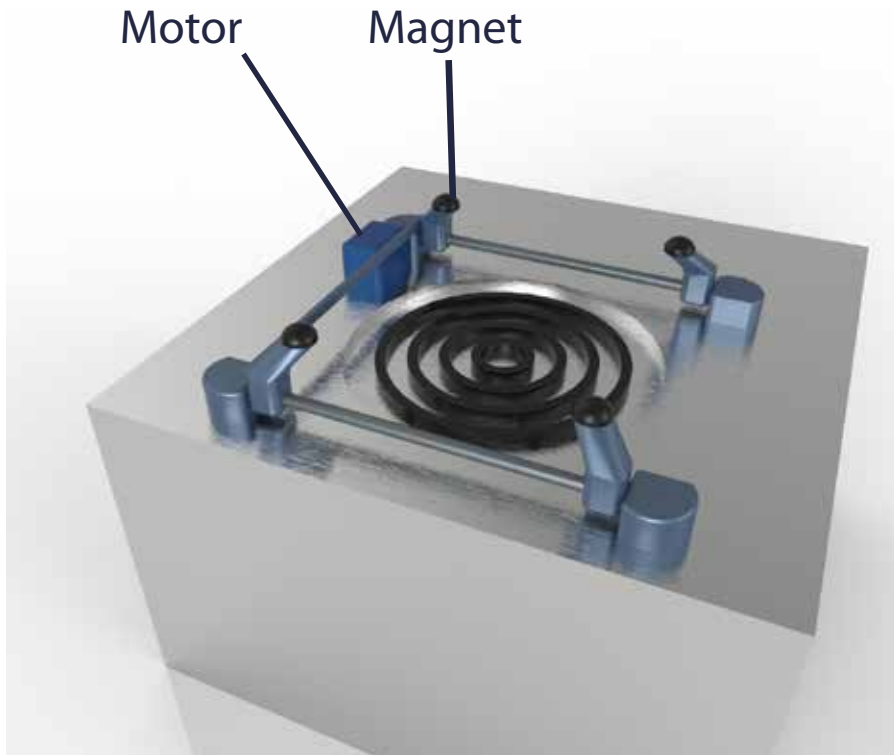
# Mapping Matrix



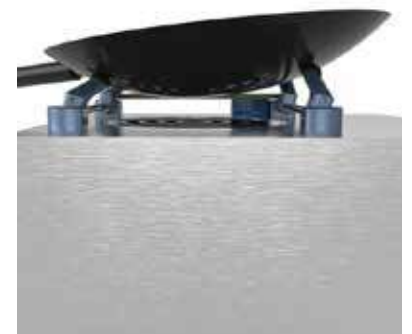
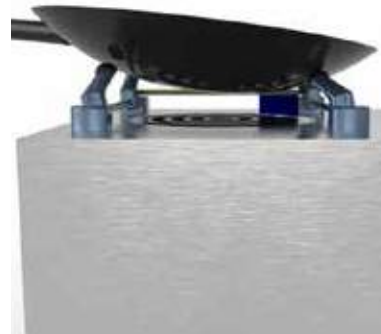
# Concept Sketching



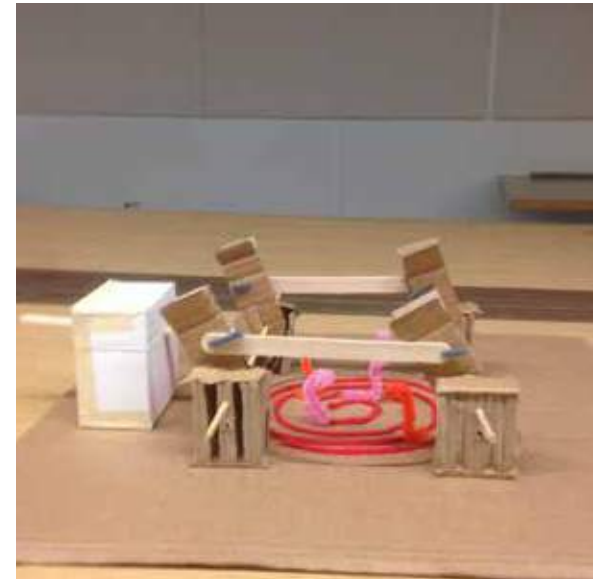
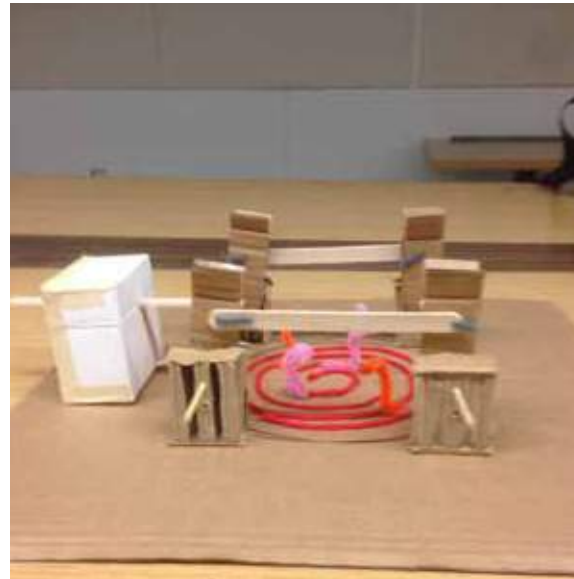
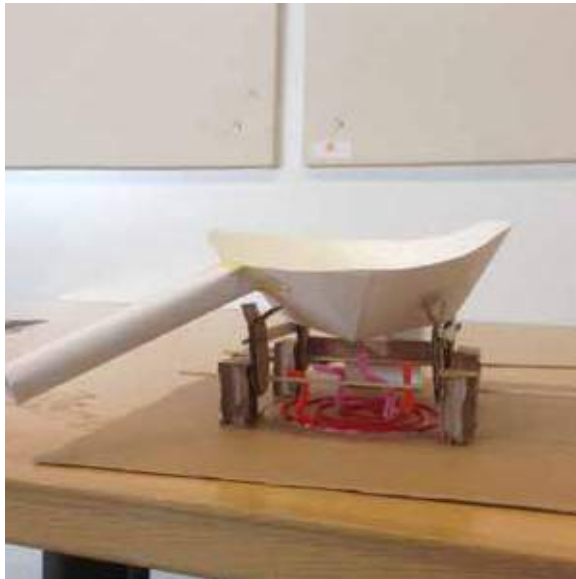
# 3D Model



- + It is a pot shaking device.  
Can fit on any stove.  
Use a motor to drive.  
The magnet on the top can catch the pot.



# Prototype



# Story Board





# Supporting System



Manufacture



Made in China.



Retail



Buy the device from store.



Go to work.



Restaurant



Easy assemble, magnet will fix the device on the stove.  
Easy use, just plug in and turn on.  
After sell service.



Advertising System

Promoting the idea of "An ounce of prevention is worth a pound of cure."



See the ads everywhere and every day, enhancing the awareness of prevention.