

Cat 4 Resource Development

Group 4-50 Project Anti-Diabetes

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ABSTRACT

Project Anti-Diabetes is an integrated, intuitive, and user-friendly resource package which aims to provide users with quality and healthy food recipes to reduce the likeliness of users suffering from diabetes. A cookbook is installed inside a webpage that features video tutorials so as to guide the parents towards making the dish. There is also a detailed guide for parents to refer to to make their own recipe. In addition, there is also a brochure to guide parents to purchase healthier foodstuffs. Also, most of the websites that were found online were containing. We had also added an online forum for people to give their feedback for the website and share their very own recipes for a whole diversity of dishes.

1 INTRODUCTION

1.1 RATIONALE

With a majority of people willing to cook at home for health reasons, we decided that a simple yet healthy e-cookbook is feasible for parents to refer to. During meal times, people may struggle with deciding what to eat such that the food is healthy and ingredients are also easily accessible. Otherwise, they may not have enough culinary skills as some dishes may be too difficult or confusing to prepare. As such, they may give up on cooking at home, sacrificing their health for unhealthy hawker food.

1.2 OBJECTIVES

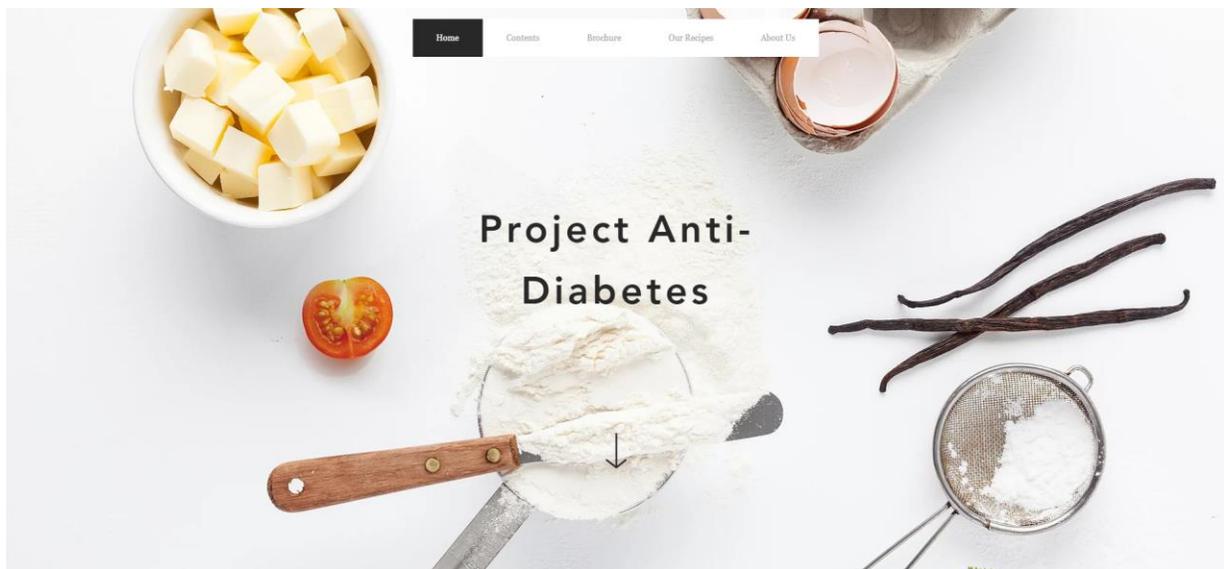
1. To convince parents or caregivers to cook at home instead of buying unhealthy food from outside.
2. To make an e-recipe book & reference brochure for parents and domestic helpers to use so that they can cook food with less sugar, salt and oil.

1.3 TARGET AUDIENCE

Our target audience are: Parents/Caregivers/Domestic helpers as they are the ones that provide food for the children.

1.4 RESOURCES

The resources created for this project was an integrated online platform consisting of a contents page, brochure, recipe page, online forum and an about us section.



Honey Banana Pancakes



Serves 3 - 4

Preparation Time: 25 min

Ingredients:

- 1 cup all purpose flour
- 2 tsp. baking powder
- 1/8 tsp. salt
- 1 egg, beaten
- 1 cup of milk
- 2 tbsp. canola oil
- 2 tsp. honey
- 2 medium ripened bananas, peeled and mashed

2. REVIEW

Most of the recipes that we found online are consisting of western cuisine and may not be very palatable to Singaporean taste buds. Thus our recipes are more suited for local taste buds so that they may be more appealing to Singaporeans. Of course if some people have preferences for western dishes, we also added some healthy variants of it. Most e-recipe books may also do not have an online forum so we decided to add it in our website.

3. METHODOLOGY

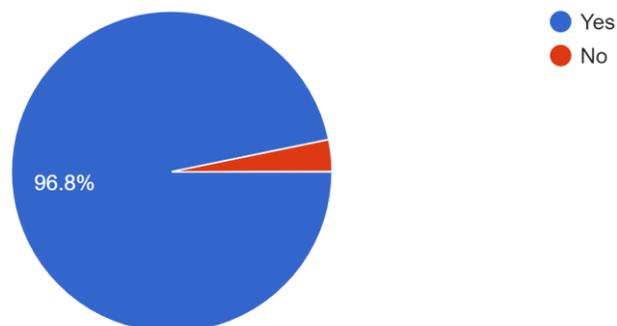
3.1 NEEDS ANALYSIS

A needs analysis was conducted to clarify the feasibility of our resource package. Statistics were collected from surveys done by more than 100 adults to clarify the problem of diabetes in Singapore. Indeed, more than 100 adults out of 124 confirmed that diabetes is a problem in Singapore. Next, we questioned the feasibility of our product.

SURVEY RESULTS

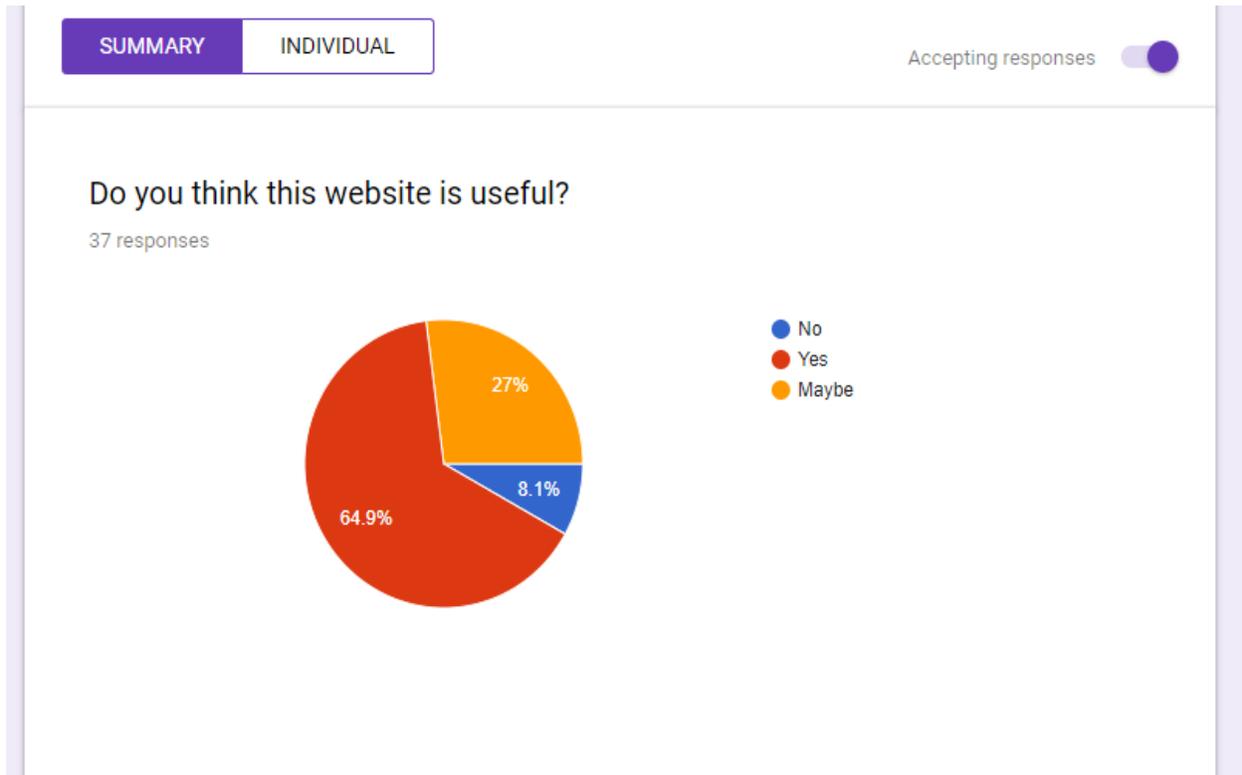
Do you think that diabetes is a problem to Singapore?

124 responses



3.2 PILOT TEST

This pilot test was administered to 35 adults who gave their responses towards the website and their feedbacks were collected. The feedback was generally positive , but recommendations were also incorporated into the improvements of the website.



RECOMMENDATIONS

Provide more info on how each type of ingredients helps

Some dish are too bland, can consider using spices(pepper, cinnamons) etc.

feedback forum

3.3 CONSTRUCTION OF RESOURCES

We reviewed famous Singapore cuisines that appeal to most local taste buds by visiting famous hawker centres all around the country. After analysing the ingredients used, unhealthy factors were either removed or replaced. Online health nutritionists' tips on healthy foods were taken into account for replacing the ingredients. Step-by-Step videos were recorded by us to guide users accessing the website.

Discussions forums were also included in the website to provide a wider variety of food choices.

4. OUTCOME AND DISCUSSIONS:

Although the feedback during pilot-testing was mostly positive, we decided to add a feedback and sharing forum for people.

This forum allows for people to share their own recipes and tell us their feedback for the website such as what can be improved and what else can be added.

FINAL OUTCOME

We have a website with 9 recipes that helps prevent diabetes as they are low in sugar, salt and oil. However, we do not compromise on taste as the dishes are still delicious as we use other healthy ingredients to add flavour to the dish and appealing to local taste buds. Every ingredient used in the recipe also contains health benefits, for example bananas contain many important nutrients such as vitamin C. Brochures were provided to enhance users' knowledge of healthy food options and discussing forums were added to increase variety of recipes.

LIMITATIONS

We cannot force everyone in Singapore to follow the recipe and guides in the website.

Further improvement to the recipes so that the people using our website can have a wider range of healthy dishes to cook.

Some people may refuse to cook at home and insist on buying food instead.

POSSIBLE FURTHER WORKS

Target youths so the tips and website will appeal to them and it will stand out from existing similar websites.

Website - Provide more affordable and healthy recipes.

We can focus on eatery outside home.

5. CONCLUSION

Project Anti-Diabetes was a tedious project to undertake due to the fact that we had to travel to hawker centres in Singapore to understand what dishes are suited to Singaporean's taste buds and what dishes are healthier than the others and their reasons. We also had to come up with, cook and prepare the dishes that came up in the recipe. Perseverance was the one quality that was very much needed for the completion of the project or else we could have just given up half-way through the project as it is very complex. The final element needed to finish our project was creativity as we needed to make the dishes healthy yet still remain tasty.

6. REFERENCES

- 1) National Day Rally: 1 in 9 Singaporeans has diabetes; problem 'very serious', says PM Lee retrieved on 26/6/19 from <https://www.channelnewsasia.com/news/topics/nd2017/national-day-rally-1-in-9-singaporeans-has-diabetes-problem-very-9140176>
- 2) Singapore's approach to war on diabetes 'generally in right direction': Health Minister Gan Kim Yong retrieved on 30/6/19 from <https://www.channelnewsasia.com/news/singapore/singapore-diabetes-right-direction-gan-kim-yong-10974220>
- 3) Spending more time at home cooking healthy dishes is a top resolution for many in 2019, Peapod finds retrieved on 18/6/19 from <https://www.foodnavigator-usa.com/Article/2018/12/11/Consumers-prefer-and-prioritize-cooking-at-home-Peapod-finds>
- 4) 3 Reasons Why Singaporeans Aren't Eating at Home More retrieved on 18/6/19 <https://blog.moneysmart.sg/dining/3-reasons-why-singaporeans-arent-eating-at-home-more/>
- 5) Diabetes - HealthHub retrieved on 19 January 2019 from <https://www.healthhub.sg/a-z/diseases-and-conditions/626/diabetes>
- 6) Plan Your Meals with My Healthy Plate retrieved on 3/7/19 from <https://www.healthhub.sg/live-healthy/1332/plan-your-meals-with-my-healthy-plate>
- 7) 3 Reasons Why Singaporeans Aren't Eating at Home More Retrieved on 14 March 2019 <https://blog.moneysmart.sg/dining/3-reasons-why-singaporeans-arent-eating-at-home-more/>
- 8) Cook at home? It's a hassle for many Retrieved on 14 March 2019 <https://www.asiaone.com/singapore/cook-home-its-hassle-many>
- 9) What is Diabetes? Retrieved from <https://www.niddk.nih.gov/health-information/diabetes/overview/what-is-diabetes>

- 10) Singapore's culinary scene faces varying challenges, but locals still prefer and believe in the value of true local, authentic food" Retrieved on 14 March 2019 from <http://webershandwick.asia/wp-content/uploads/2014/04/FF-SINGAPORE-16April.pdf>
- 11) 6 unhealthy vegetable dishes to avoid at hawker centres retrieved on 1 April 2019 from https://www.hungrygowhere.com/dining-guide/what-to-eat/unhealthy-vegetable-dishes-to-avoid-at-hawker-centres-*aid-f9823101/
- 12) Reference retrieved on 1 July from: <https://www.self.com/story/what-a-registered-dietitian-tells-patients>
- 13) Reference retrieved on 1 July from https://www.healthhub.sg/live-healthy/15/dietary_guidelines_adults
- 14) Reference retrieved on 1 July from <https://www.mayoclinic.org/healthy-lifestyle/childrens-health/in-depth/nutrition-for-kids/art-20049335>
- 15) 10 Healthier Sugar Alternatives You Should Try
<https://www.aplaceformom.com/blog/2-17-15-healthy-sugar-alternatives/>
- 16) 10 tips for healthy eating with diabetes
<https://www.diabetes.org.uk/guide-to-diabetes/enjoy-food/eating-with-diabetes/10-ways-to-eat-well-with-diabetes>
- 17) Cheng tng retrieved on 6/8/19 from <https://www.sharefood.sg/2016/09/19/cheng-tng/>
- 18) Tang Yuan retrieved on 6/8/19 from <https://souperdiaries.com/tang-yuan-recipe/>
- 19) Sweeter than soda? The hidden sugars in bubble tea retrieved on 6/8/19 from <https://www.channelnewsasia.com/news/singapore/bubble-tea-sugar-content-sweeter-than-coke-soda-11063316>
- 20) Guess how much sugar there is in your favourite local dessert retrieved on 6/8/19 from <https://graphics.straitstimes.com/STI/STIMEDIA/Interactives/2017/01/desserts-quiz/index.html>

21)Ice Cream Is a Cold, Sweet Way to Show Off Corn retrieved on 6/8/19
from <https://www.nytimes.com/2013/07/31/dining/ice-cream-is-a-cold-sweet-way-to-show-off-corn.html>