

CAT 4 RESOURCE DEVELOPMENT

# ChoLESSterol

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## **ABSTRACT**

Project ChoLESSterol addresses the issue of high cholesterol through the use of infographics and animated videos, alongside a user-friendly website to store all of our products, as well as some quizzes to further strengthen our audiences' understanding. In the hope of reaching as many people as possible, a Chinese version of all our products is also available, and we have collaborated with the Health Promotion Board. They helped us check the validity of our products. They can also consider putting our products on their webpage so that the people visiting their website would also benefit from the extra knowledge.

## **1 INTRODUCTION**

### **1.1 Rationale**

Based on the 2010 National Health Survey, the percentage of Singaporeans with high total blood cholesterol was 17.4% as of 2010. High cholesterol can increase your risk of cardiovascular disease, such as heart disease and stroke. It also causes fatty deposits (known as plaques) to build up inside your arteries. If one of the plaques in your arteries breaks off and blocks the artery completely, it can cause a blood clot, completely blocking the blood supply to part of your heart, causing a heart attack. Singapore also has the problem of an aging population, with the average life expectancy being 82 years. Thus there is a large amount of old people who will be facing this and many more conditions. High cholesterol levels can cause the last few years of the elderly's lives to be miserable and painful. Sometimes this would be a burden to their children, who have to support them on top of their own families. This would definitely become a very serious societal problem in the future.

## **1.2 Objectives**

The objectives of our project is to spread awareness about cholesterol levels in older adults and show how they affect them. We also introduced ways which they can help to lower their cholesterol levels. Through our project, we hope that they will adopt a healthier lifestyle.

## **1.3 Target Audience**

Middle-aged adults (40 to 65 years-old) and elderly (65 years-old and above) is our main target audience, as risks of getting high cholesterol increases with age. Most cholesterol prevention campaigns are targeted at children or young adults, like the Healthy Eating in Schools initiative. On top of that, Health Promotion Board is more focused on combating obesity and diabetes, with campaigns like Beat Diabetes, and is less subtle about cholesterol.

## **1.4 Resources**

The resources created for this project is a simple and user friendly website which contains the 3 infographics and 3 animated videos in both English and Chinese. The website also comprises of quizzes for our target audience to attempt so that they will know how much they understand about cholesterol after looking through our products. The infographics were designed to be simple and concise, using a straight-to-the-point manner to convey our messages across. The animated videos were also made to be as interesting and attractive as possible, with commonly discussed topics on cholesterol.

# Project ChoLESSterol



ENGLISH VERSION || 英文版

CHINESE VERSION || 华文版

Welcome to Project ChoLESSterol webpage. All our infographics and animated videos can be found here.

*Homepage of the website ([projectcholessterol.weebly.com](http://projectcholessterol.weebly.com))*

## 2 REVIEW

There are not many similar products out in the market as of now. Although the Health Promotion Board has some infographics about healthy eating, they are quite lengthy and wordy which would make people lose interest in them before they finish reading the whole thing. Also, they do not have videos on cholesterol. Some websites like mayoclinic.org contain good and useful methods to lower cholesterol level but they use many complex terms so not everyone, especially the elderly, would be able to easily comprehend the information on these websites.

### 3 METHODOLOGY

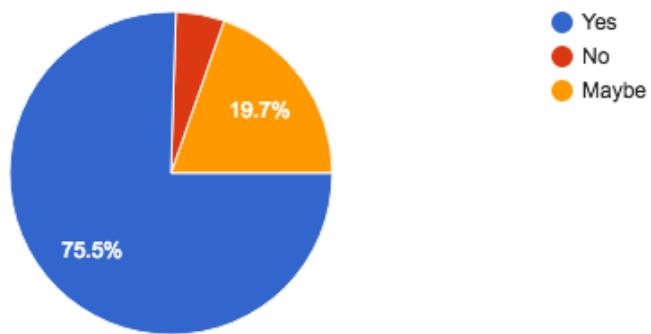
#### 3.1 Needs Analysis

A needs analysis was conducted to ascertain the relevance of such a project. We sent a survey to the various Parent Support Group Whatsapp Chats and garnered 351 responses. Indeed, respondents indicated that they want to know more about cholesterol.

**Figure 1: Interest levels of respondents on infographics showing how to reduce cholesterol**

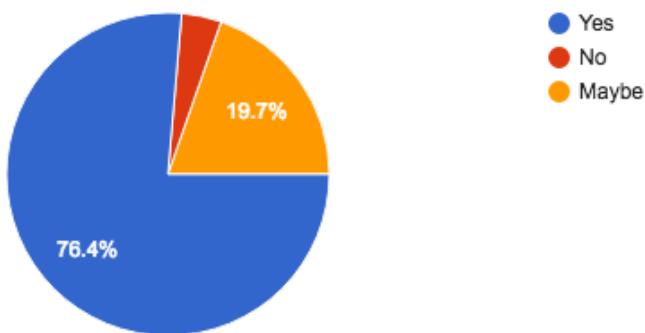
Would infographics showing how to reduce cholesterol level in middle-aged and elderly adults be useful?

351 responses



**Figure 2: Interest levels of respondents on a website showing how to reduce cholesterol**

Would a website containing information on cholesterol management be useful?  
351 responses



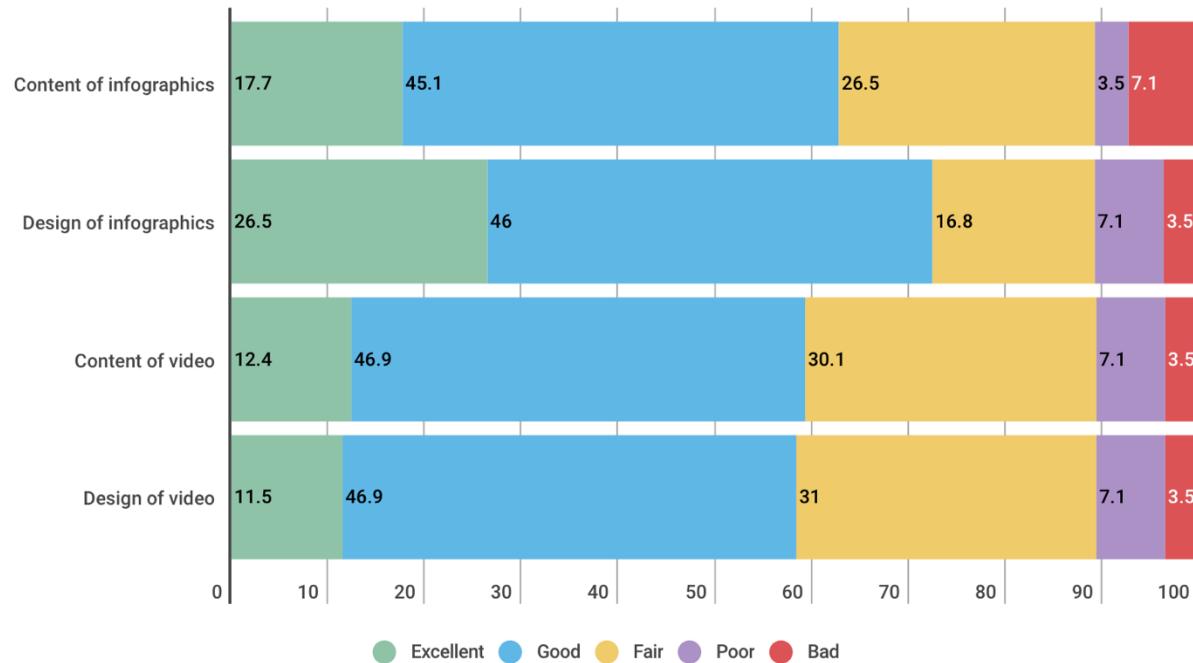
### 3.2 Development of Resources

We began thinking of common topics of cholesterol that we should address. We searched for resources and read up on information relating to cholesterol. In the process of researching, we decided to make animated videos as research shows that people learn much more from such videos. After deciding on the topics to do, we embarked on infographics and animated videos. After we had completed with our products, we collated all of them on a website and conducted our pilot tests. Then, we edited our products based on the comments from the pilot test. Finally, we sent our products to the Health Promotion Board for them to check the validity of our products.

### 3.3 Pilot Test 1

We conducted our pilot test at Toa Payoh MRT station. We interviewed 47 elderly and middle-aged people. We also sent the survey to the PSG chat, gathering a total of 113 responses.

**Figure 3: General Feedback**



**Figure 4: General comments.**

Too much information to stop and to read all, short and sweet inform will be much better

The words in the videos are flashing too fast. If your main target audience is the higher age groups, then you should slow down a little.

After reading some of the comments given to us, we used them to improve our products.

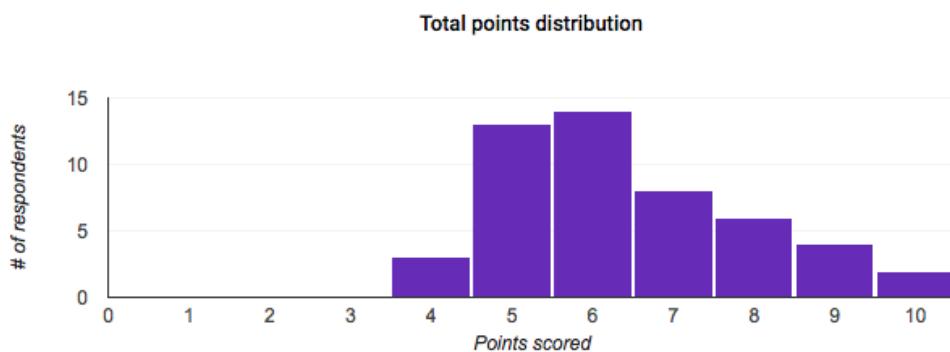
### 3.4 Pilot Test 2

We conducted the pilot test at Bishan Community Centre and MRT station. We had 20 street interviews where we asked them to take a preliminary test before showing them the products and letting them take the test again.

**Figure 5: Results of the test before reading our materials**

#### Insights

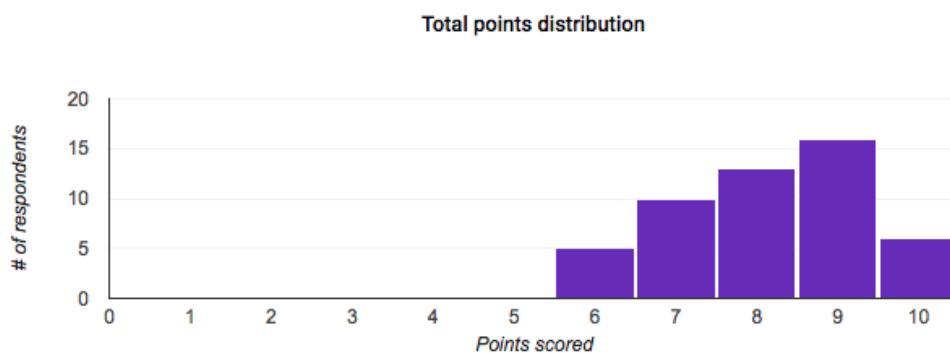
Average 6.42 / 10 points	Median 6 / 10 points	Range 4 - 10 points
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**Figure 6: Results of the test after reading our materials**

#### Insights

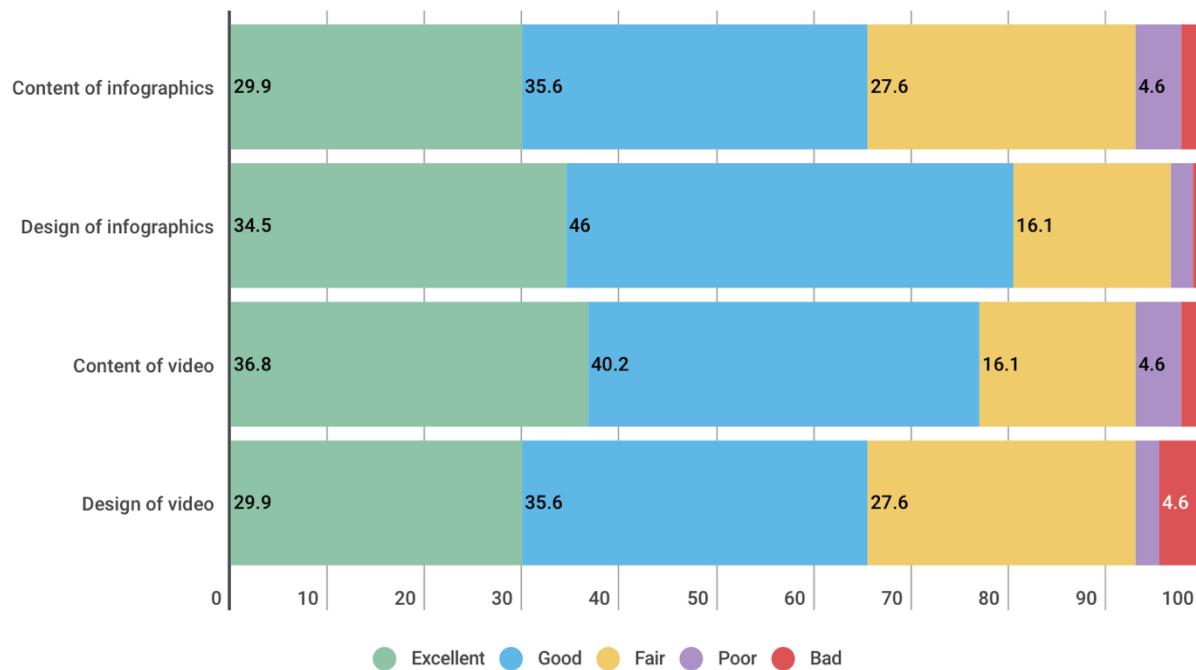
Average 8.16 / 10 points	Median 8 / 10 points	Range 6 - 10 points
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### 3.5 Pilot Test 3

We sent a similar survey out with our improved products and we received much more positive results as compared to Pilot Test 1. We sent the survey to the PSG chat. We received a total of 87 responses.

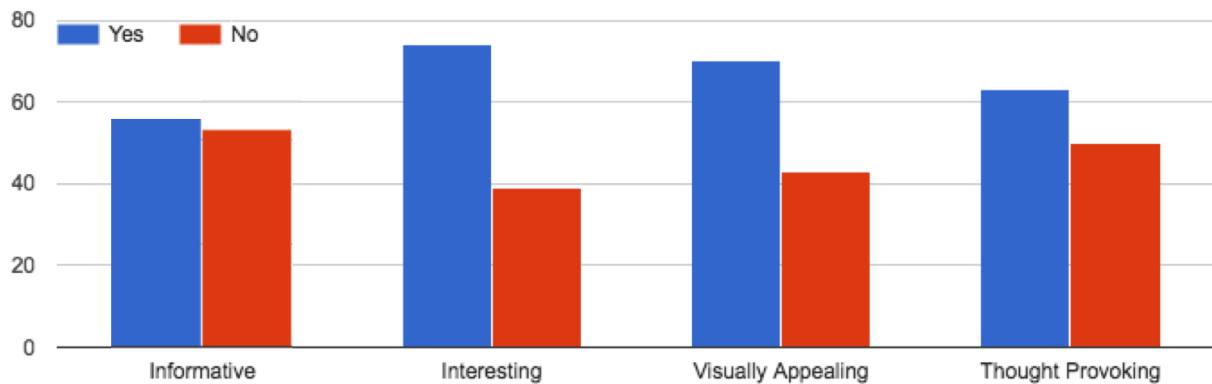
**Figure 7: Products Feedback**



### **Figure 8: Comparison of Infographic to HPB Infographics**

We compared our infographics to a HPB brochure on reducing cholesterol. However, due to the simpler nature of the infographics, the infographic lacks in information.

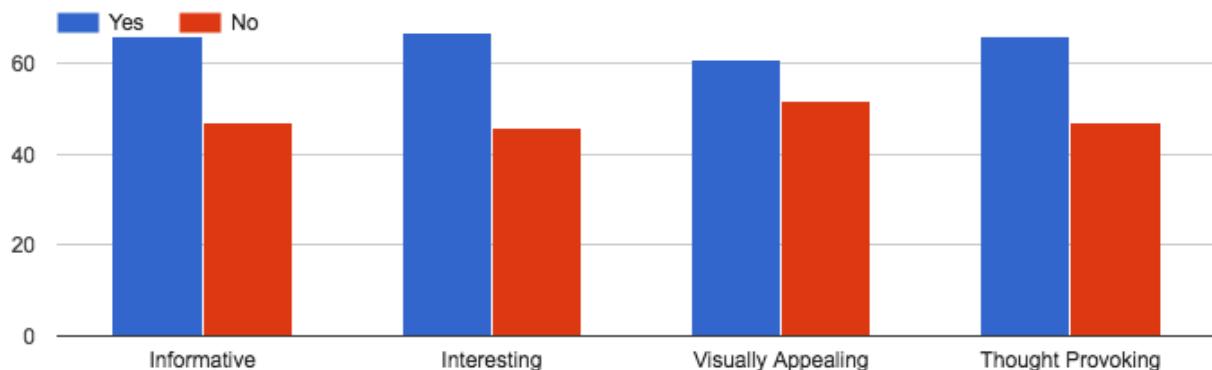
Compared to HPB, are our infographics more



### **Figure 9: Comparison of video with HPB video**

As we could not find a HPB animated video on reducing cholesterol, we decided to use a video on diabetes as a comparison point. As a result, the informative capabilities were disregarded in this question.

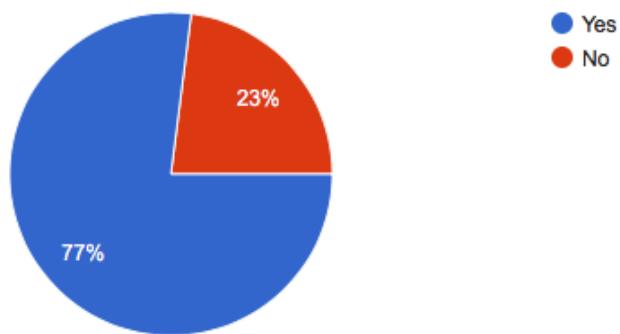
Compared to HPB, are our videos more



**Figure 10: Website Feedback**

The website is user-friendly and easy to navigate.

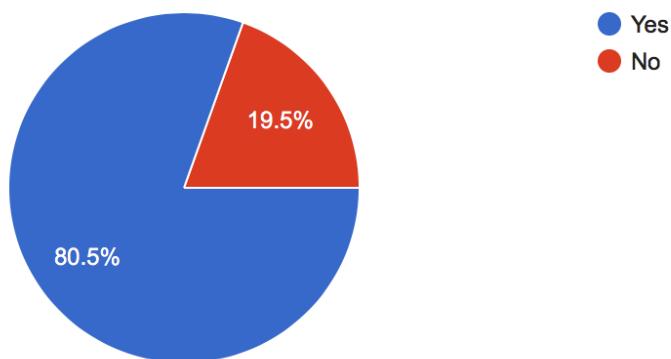
87 responses



**Figure 11: Impact of our project**

Will you adopt a healthy lifestyle after viewing our products?

87 responses



## Figure 12: General comments

Love that there is a Chinese version for the websites and the products.

You guys covered many important topics for cholesterol. The products are really helpful for me.

The quiz is really effective in telling me how much I know about cholesterol.

After reading your products, I decided that I am going to reduce my cholesterol level starting by eating more healthily. I will eat fewer saturated-fat-rich foods, processed meats, and cholesterol-rich foods like egg yolks. I will also try to exercise at least 3 times per week.

#### **4 OUTCOME AND DECISION**

We decided to create a simple and user-friendly website that contains all 3 infographics and 3 animated videos in both English and Chinese language.

Our project had some limitations like creating something totally different from what is already available on the Internet. Also, our project can only encourage the adults to be more wary of their cholesterol levels and we cannot make sure they will try to reduce their cholesterol levels.

To influence more people, we could have collaborated with different communities centres and asked them to put our infographics up on the notice board so more people would be able to benefit from our project.

#### **5 CONCLUSION**

Project ChoLESSterol has always been a difficult project to undertake, as long hours had to be put into research to ensure that our contents were factually accurate. Additionally, even more time had to be spent seeking feedback from the public, in order to continuously improve on our design. However, we feel that this project has also taught us many new things, like how to manage the challenges that may arise along the way. During our first pilot testing, obtaining feedback was difficult as some only spoke Chinese. This was quite frustrating for us, as we only had English infographics and videos then, thus they quickly lost interest and walked away. Also, we had difficulties finding people to do our quiz before reading our products and attempt the quiz again. As this pilot test was rather time consuming, it was quite hard to find people to test on. It was only through teamwork that our project became a success, as we came together to find a way to get past each and every problem that arose, finding creative and effective ways to get the job done.

## **6 ACKNOWLEDGEMENTS**

We would like to acknowledge and extend our deepest gratitude to the following individuals, without whose help the project would never be a success.

Mdm Hemalatha for patiently guiding us throughout the whole journey of our project.

Health Promotion Board for helping us to check the validity of our products.

Pilot test participants for giving us feedback on how to improve our products.

## **7 REFERENCES**

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