

# **Diabetes Awareness**

2021 Group 4-083

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## **Abstract**

Our project, Diabetes Awareness, is a project-based in Hwa Chong Institution, and is aimed at students who may consume unhealthy amounts of sugar and other nutrients each day. We know that diabetes in Singaporeans, especially the aged, is an extremely prominent problem, and thus we hope to prevent such a problem from occurring here in Hwa Chong, by educating students on how to prevent getting diabetes when they age through a website. The Diabetes Awareness website gives detailed information on how people get diabetes, how to choose healthier food with less sugar, how to lead a healthier lifestyle and in turn, prevent diabetes at an older age. In conclusion, Diabetes Awareness is a project which hopes to help reduce the chances of students getting diabetes in the future, by creating an online platform which provides thorough information on the food nutrition in the canteen.

## **1. Introduction**

### **1.1. Rationale**

This project was conducted to increase awareness of diabetes, and to lower the diabetes rate amongst young Singaporeans. Many young people are at increased risk of getting diabetes, in fact, the rate of new diagnosed cases of type 2 diabetes below 20 years old has increased “at 4.8 percent.”. Additionally, Singapore is ranked 2nd in percentage of population of people having diabetes, standing at 10.5%. If Singapore’s population is estimated at 5 million, it means that around 5 hundred thousand people in Singapore have diabetes, it means that twenty five thousand students currently have diabetes. In addition, students may make bad lifestyle choices by eating unhealthy foods everyday in school, causing them to have a much higher risk of diabetes in the future. Thus, it is imperative to start making youth aware about diabetes, in order to prevent rates of diabetes from increasing further.

## 1.2. Objectives

The objectives of this project were to

- To spread awareness of the effects of diabetes and how it can be prevented
- Create a website to educate people on the dangers of diabetes
- Educate Hwa Chong students on how they can avoid diabetes and teach them that diabetes is more than a permanent overdose of sugary foodstuff

## 1.3. Target Audience

Our target audience are Secondary 1 to 4 students in Hwa Chong Institution.

## 1.4. Resources

The resources we had created for this project is a website with detailed information regarding diabetes. This website will be available to all Hwa Chong students from Secondary 1 to Secondary 4.



The screenshot shows a website with a dark blue header. The navigation menu includes: Diabetes Project Work, Home, Diabetes Introduction (highlighted), Symptoms of Diabetes, Causes of Diabetes, Types of Diabetes (with a dropdown arrow), Gestational, and More (with a dropdown arrow). A search icon is on the right. The main content area has a large white title 'Diabetes Introduction' on a dark blue background. Below this is a photograph of various colorful pills and a syringe on a white surface with the word 'Diabetes' printed on it. To the right of the photo is the heading 'So what is diabetes?' and a paragraph: 'Diabetes is a chronic (long-lasting) health condition that affects how your body turns food into energy.' At the bottom left, there is a circular icon with an 'i' and the text 'About Diabetes'.

## **2. Review**

There are existing websites on diabetes, however, they are not really targeted at teenagers and do not really provide good ways to change their lifestyles. The target audience would also not actively search up ways to prevent diabetes. The websites are also not engaging as they lack visuals. Moreover, most of the existing websites on diabetes are very difficult for students to understand and students will easily lose their interests. Through our website, we hope more Hwa Chong students will be more well informed on the topic of diabetes and ways to prevent and manage diabetes. They will learn the effects of diabetes and possibly spread this useful information to others.

## **3. Methodology**

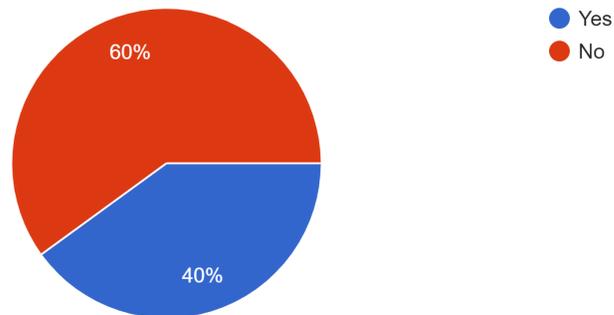
### **3.1. Needs Analysis**

A needs analysis was conducted to ascertain the relevance and the need of such a project. We have surveyed about 50 students in Hwa Chong Institution from the age of 13 to 16. From the survey results, we can see that there are various answers across the different choices. This shows that many of Hwa Chong Students do not really know much about basic facts of diabetes. This might be because they do not have anyone they know diagnosed with diabetes. Hence, we feel the need to raise awareness to Hwa Chong students about diabetes.

### 3.2. Survey Results

Do you know anyone who has diabetes?

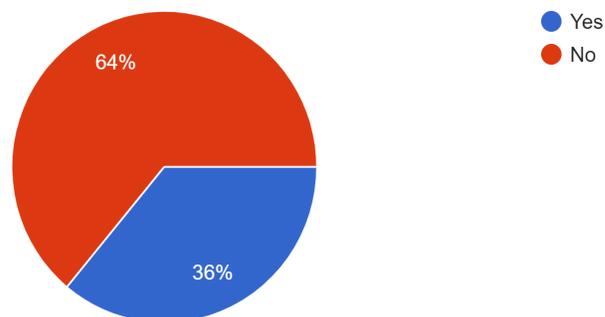
50 responses



Most people have never encountered diabetes in their family and are unlikely to know what diabetes is.

Do you know how prevalent diabetes is in Singapore among the Youth?

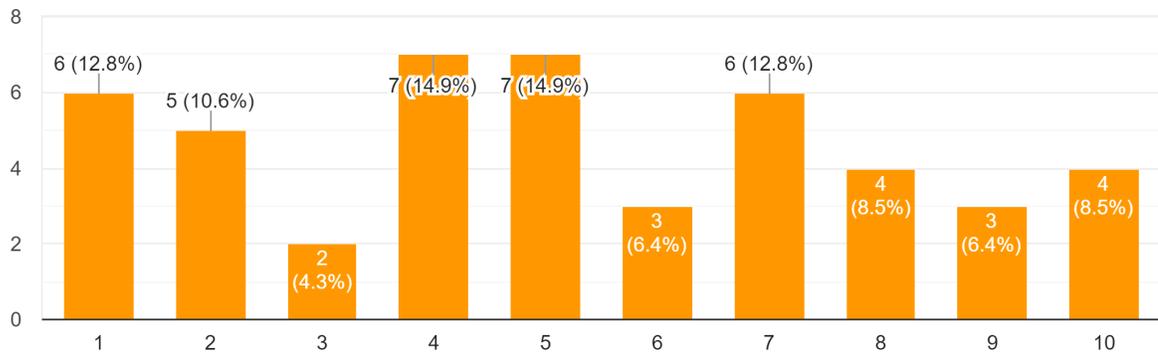
50 responses



Majority of the respondents do not know how prevalent diabetes is among the young.

If yes, how many youth out of 10 do you think have diabetes?

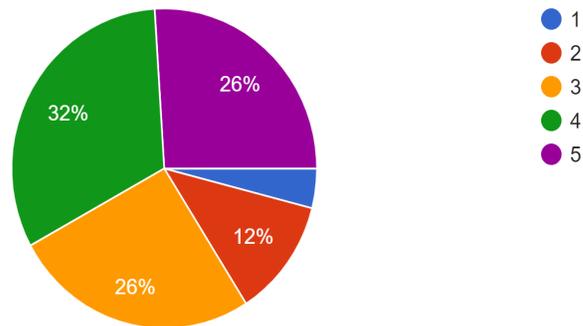
47 responses



Many people do not know how many youth in 10 have diabetes, which is 3.

One out of how many people in Singapore are likely to get diabetes in their lifetime?

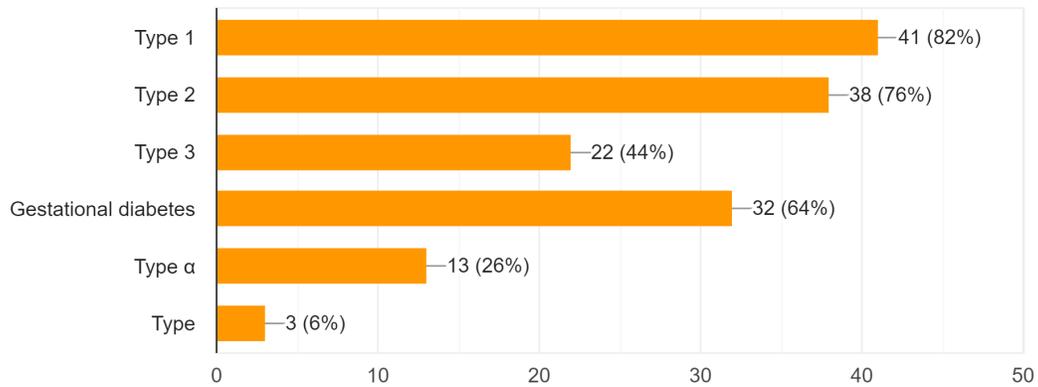
50 responses



Many students picked 4 to 5, however, the answer is one out of 3 people in Singapore are likely to get diabetes in their lifetime.

### What are some types of diabetes?

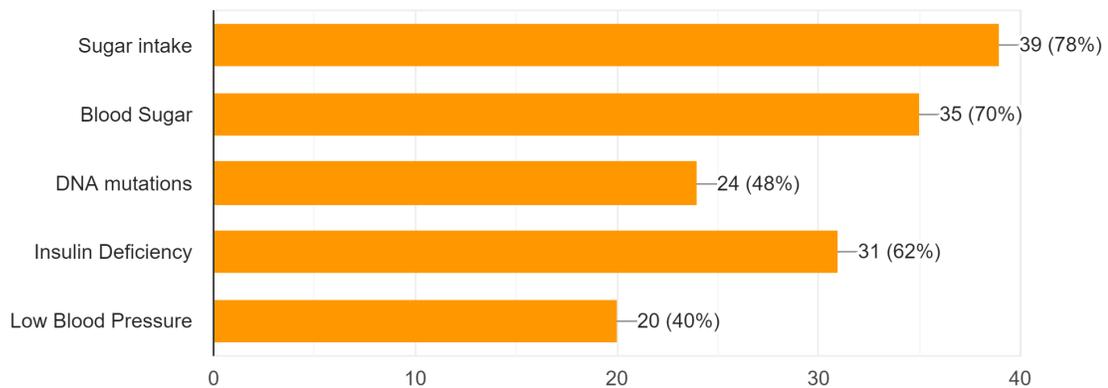
50 responses



Many people do not know all the forms of diabetes. There are only Type 1 diabetes, Type 2 diabetes and Gestational diabetes.

### Do you know what causes diabetes?

50 responses



Majority of the people are unsure what exactly causes diabetes. The correct answer is insulin deficiency and sugar intake.

## **4. Outcome and Discussion**

While our website received positive feedback and was generally successful in helping our target audience gain a better understanding of diabetes, its variants, how to prevent it and what are the symptoms of diabetes, we discussed filming additional videos like comedy skits to further engage our target audience. However, this did not go through due to a lack of suitable facilities to film in and Covid-19 measures still being in place, restricting our activity as a group severely.

## **5. Conclusion**

Developing the website has been a tedious task. It required many hours on our part to compile and paraphrase research and also to interact with people who have contracted diabetes to get their opinions and personal experiences too. This project has been done under much pressure from both our parents and the ever nearing presentation date.

Perseverance was a necessity if we desired to finish this project on time, a lot of sleeping hours were sacrificed, with some of us staying up till late in the night to finish this. It was not easy to gain connections with diabetics as diabetics in our families were scarce and barely scraped enough family members to interview. We had to balance out between project and homework and made some sacrifices in our grades as the final evaluation drew nearer.

At the end of the day, however, we are glad that we have achieved our goals; namely, the fact that members of our target audience now have a deeper understanding of diabetes and they are now equipped with the knowledge of how diabetes is caused, and hence how to prevent it and they know how to spot early symptoms of diabetes .

**- end -**

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