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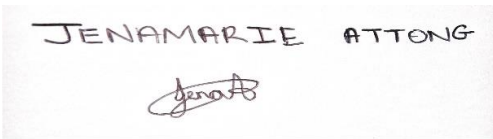
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ABSTRACT

Trinidad ranks 9th in the world in terms of an obesity rate in children less than 5 years old. This has been linked to reduced physical activity, increased screen time and an unhealthy diet. This thesis explores the promotion of healthy eating habits in primary schools in Trinidad, focusing on the evaluation of current programs such as the School Nutrition Programme. The study investigates the benefits of healthy eating for students and proposes possible solutions to address the issue of unhealthy eating in Trinidad. Through a comprehensive literature review and analysis, this research aims to contribute to the enhancement of nutrition education and practices in school settings. By examining the effectiveness of existing initiatives and suggesting potential strategies for improvement, this study seeks to foster a culture of health and wellness among Trinidadian students.

Key Words: primary schools in Trinidad, School Nutrition Programme, unhealthy eating habits, benefits of healthy eating, solutions, nutrition education, student wellness.

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INTRODUCTION

According to 2022 data from the World Health Organization, Trinidad ranks 9th in the world in terms of an obesity rate in children less than 5 years old. This is also evident in the concerning number of overweight and obese children that are brought to hospitals and private clinics. This has been connected to unhealthy eating habits, more screen time, and less physical activity. As a result this study expands on the current measures that have been implemented to promote healthy eating habits in schools, outlines the advantages of healthy eating for children but also present solutions to reduce poor eating habits in Trinidadian schools.

Rationale:

The purpose of this study was to investigate the benefits of healthy eating habits for children, given the concerning obesity rate in Trinidad. However, as a result of the primary and secondary data gathered, the study broadens to identify the obstacles to healthy eating in Trinidadian schools and to develop potential remedies to lessen unhealthy eating practices and, consequently, obesity.

Thesis Statement:

Within Trinidadian schools, it can be argued that healthy eating habits are merely recommended and not efficiently implemented. This study expands on the measures that have been implemented to promote healthy eating habits in schools, outline the advantages of healthy eating for children but also presents solutions to reduce poor eating habits in Trinidadian schools.

Parameters:

This study focuses on the present-day situation within Trinidadian schools, particularly primary school students. It examines the measures that have been implemented to promote healthy eating habits, the success rate of these initiatives but also the benefits of healthy eating for children and possible solutions to the issue of unhealthy eating. It focuses on parents and students within Trinidad, specifically the Southern and Central region.

Objectives:

This study intends to evaluate the current measures implemented to promote healthy eating habits in schools, identify the advantages of such habits, and outline solutions to reduce poor eating habits amongst children in Trinidad.

Definition of Terms:

Childhood Obesity- Childhood obesity is having a body mass index (BMI) at or above the 95th percentile on the Centers for Disease Control and Prevention's (CDC) specific growth charts.

Obesity means weighing more than what is healthy for a given height. Obesity is a serious, chronic disease. It can lead to other health problems, including diabetes, heart disease, and some cancers.

NCDs- Non-communicable diseases are diseases that are not spread through infection or through other people but are typically caused by unhealthy behaviours.

Program- a set of related measures or activities with a particular long-term aim.

Eating Habits- conscious, collective, and repetitive behaviors, which lead people to select, consume, and use certain foods or diets, in response to social and cultural influences.

Solution- an action or process of solving a problem.

Methodology:

The focus of the study is on parents, primary school children, and members of the public who participate in ongoing initiatives like the School Nutrition Program. They were selected in order to compile data on the initiatives put in place to lessen unhealthy eating practices in schools, look into parents' experiences with these initiatives, emphasize the advantages of good eating practices for students, and produce a list of potential remedies to encourage healthy eating. Regarding research methodology, sources included online articles, an employee of the school feeding program and a final year UWI student pursuing a degree in human nutrition and dietetics, were contacted to obtain qualitative data. Parents' experiences with the current policy in place, their involvement in encouraging unhealthy eating, and the advantages of good eating habits for children were all gathered quantitatively through a questionnaire.

Chapter Outline:

This study consists of 3 chapters. Chapter 1 presents the evaluation of the current implemented programs, specifically the School Nutrition Programme, to promote healthy eating habits in primary schools. Chapter 2 presents the benefits of healthy eating for students. Chapter 3 presents possible solutions to the issue of unhealthy eating in Trinidad. In each chapter, the findings are analyzed and compared to the literature found to assess its similarities and differences.

Literature Review:

This study focuses on the measures implemented to reduce poor eating habits, the benefits of healthy eating for children and the proposal of solutions to this problem of unhealthy eating in Trinidadian schools. Based on the literature via secondary sources, it is evident that there have been measures implemented in Trinidad to promote healthy eating. Firstly, the results of the Survey of BMIs directed by the Caribbean Food and Nutrition Institute (CFNI) for the Ministry of Health in 2010, revealed that overweight and obesity in schoolchildren aged 5-18 years, increased from 11% in 1999, to 23% in 2009 demonstrating an increase of 109 % (*National Strategic Plan for the Prevention and Control of Non-Communicable Diseases*). As such, it was concluded that the high level of overweight persons and obesity which started from childhood and continued in adulthood, contributed to the increased risk of NCDs within the population. Within the same year of 2009, the Ministry of Health, developed a draft National School Health policy which focused on healthy lifestyles, safe school environment, nutrition, and physical activity (Francis-Granderson and McDonald) as a way of reducing the alarming numbers in relation to obesity.

In 2012, the Ministry of Health also implemented the *Fight the Fat* campaign, which targeted school children, adults, and the general public. This campaign promoted wellness camps, screening caravans, healthy recipe competitions, national nutrition quizzes, and workout-sessions (Francis-Granderson and McDonald). Furthermore, in the year 2014, the organization, PSI, created the CORE Youth Movement Program to improve physical fitness, boost confidence and self-worth, and provide information on healthy nutrition for a period of 8 weeks to children in Trinidad (*Trinidad and Tobago Policies, Interventions and Actions National Strategic Plan*

for the Prevention and Control of Non Communicable Diseases: Trinidad and Tobago 2017 - 2021).

In 2017, Health Minister, Terrence Deyalsingh, stated that there would be a ban on soft drinks. From April of that year, he stated that not only soft drinks would be banned from Government and Government assisted schools but also sports and energy drinks, tea, coffee and milk-based drinks with added sugars and artificial sweeteners (Kowlessar). This was done as a response to the high prevalence of childhood obesity which could lead to an early onset of non-communicable diseases. Accordingly, on September 7th, 2022, the Healthy Caribbean Coalition (HCC) partnered with regional and national partners launching a digital campaign titled #ActOnFacts: The Food in Our Schools Matters. This was intended to encourage public and policymaker support to limit the sale and marketing of unhealthy foods and drinks in and around schools, increase the availability of nutritious foods, healthier snacks and drinking water (“#ActOnFacts! – the Food in Schools Matters Launch of Groundbreaking Campaign to Get Healthy Food Policies in Our Schools”).

As for recent initiatives, Trinidad and Tobago Moves (TT Moves) was created due to the incidence of NCDs among the local population and is a direct offshoot of the wider Caribbean Moves project. Some of the initiatives include ‘Water Wednesdays’, ‘Fruit Fridays’ and ‘Shape-Up Saturdays’, to underline the cultural change required to achieve a lifestyle of regular physical activity and healthier diets (“Non-Communicable Diseases (NCD) | Ministry of Health”). As a result, the TT Moves App was launched at Queen’s Park Savannah on September 30th, 2023, as a way of reducing the existence of NCDs in Trinidad (“Media Release - Ministry of Health Launches TT Moves App in Fight against NCDs | Ministry of Health”). This app allows its users to track their fitness journey, while achieving their overall wellness goals.

In relation to measures that are still existent today, the National Schools Dietary Services Limited (NSDSL) is essential in analyzing the government's proposals in promoting healthy eating habits for students. This initiative was incorporated on May 16th, 2002, on behalf of the Ministry of Education (MoE), to manage the School Nutrition Programme (SNP). Upon full operation, the SNP provides approximately 54,000 breakfast meals and 79,000 lunches on a daily basis to students in over 800 schools (*National Schools Dietary Services Limited (NSDSL) – Ministry of Education*). However, based on a Report of the Auditor General on a Special Audit of The School Nutrition Programme, there have been some doubts regarding the actual impact of the program on the students, its governance and management (*Report of the Auditor General of the Republic of Trinidad and Tobago on a Special Audit of the School Nutrition Programme Managed by the National Schools Dietary Services Limited*). The impact of the program concerned wastage from students, the lack of analysis of the data on students' ability to learn, food testing and minimal education sessions. As for governance and management, it was stated that the government is not fulfilling its main objective in providing meals for every child and the finances regarding the program. As such, this study is essential in discovering the true impact of the School Nutrition Programme by the government in promoting healthy eating habits for primary school students in the Southern and Central region of Trinidad.

On the other hand, presenting the idea of healthy eating and incorporating the benefits for students is important to create a change in the habits of both parents and students in Trinidad, thereby reducing childhood obesity. Whilst developing, children need important nutrients to be strong and healthy. Healthy eating promotes strong bones and teeth, improves mental health, maintains a healthy weight and prevents chronic diseases (Decker). In addition, it has been stated that eating healthy meals has been linked to higher grades, better memory and alertness, and

faster information processing (Options). Despite physical benefits, a healthy diet can also have positive effects on a child's mental and emotional wellbeing as it helps prevent conditions such as depression, anxiety, bipolar disorder, schizophrenia, and ADHD (helpguidewp). However, these sources merely outline the advantages of healthy eating but do not state ways in which parents can incorporate healthy eating habits for students in a Caribbean island like Trinidad. Therefore, this study expands on these benefits as it also highlights parents' roles in relating the importance of healthy eating for Trinidadian students.

Lastly, the creation of solutions to unhealthy eating habits in Trinidadian schools is important in reducing obesity amongst children. One way in which parents can promote healthy eating habits is through meal planning with their children (Decker). This entails taking the child to the grocery store to select healthy food items, reading nutrition facts on the items, and teaching them the importance of each nutrient they consume. On the other hand, eating the rainbow of healthy foods is a creative yet nutritional way of convincing children to eat healthy (Options). It allows parents to prepare foods and snacks for children using colors of the rainbow, thereby allowing healthy eating. For example, yellow and orange fruits and vegetables are rich in vitamins C and A, which prevent cell damage, support healthy joints and eyesight, and lower cholesterol. Another proposed solution is for parents to be better role models by eating healthy foods in front of their children, cooking more meals at home, and making healthy snacks more available (helpguidewp). Unfortunately, these sources do not consider the concept of Caribbean homes where there are financial issues and parents cannot afford a balanced meal or healthy snacks, parents' lack knowledge regarding strategies to convince children of healthy eating habits or even free time to spend on meal planning. As a result, this study presents possible solutions for the promotion of healthy eating in Trinidad.

CHAPTER ONE: The evaluation of the current implemented programs, specifically the School Nutrition Programme, to promote healthy eating habits in primary schools

Mr. Glenn David, a worker with the School Nutrition Program, was interviewed in order to get the information required for this study. Furthermore, a survey instrument was developed to gather insights from parents of primary school students. Forty parents in the southern and central regions of Trinidad received this 17-question survey, which was distributed via an internet link to a Google Form.

Presentation of Data from Interview with Mr. Glenn David:

He is employed under the school feeding program where he delivers meals within the central zone. Breakfast and lunches are delivered to 10 schools within this zone from Mondays to Fridays every week. He delivers 950 breakfasts and 960 lunches each day. The principal of each school decides which students are to receive these lunches. It is also based on the feedback from parents as they request their children to be part of the program.

This program is under NSDSL, part of the Ministry of Education. They provide nutritionists and dietitians who plan the meals and portions to be served in each box of food. They even state whether whole chicken or only chicken breast must be used. The boxes are weighed on average each box must be 14oz and the temperature must be taken.

He stated that some examples of breakfast include hotdogs, cheese and spinach pie, muffins, and water. The examples of lunch include paratha, pumpkin, channa, potato and bodi or fried rice, veggies and baked chicken or chicken pelau or pumpkin rice and old-fashioned stew

chicken or macaroni pie, veggies and rice or veggie pizza. He also mentioned that 1 or 2 days per week are vegetarian meals. He stated that within schools in Pleasantville, San Fernando and Cocoyea, there is little wastage as the majority of the students consume the meals. The wastage is seen on vegetarian days.

He believes that unhealthy eating starts with the parents. It is the parents who give them money every day and then they purchase unhealthy snacks and food at the café in school. He however further stated that it is the government's role to better provide for the students as only 10-15% are fed with this nutrition program in secondary schools and less than 50% are provided for in primary schools. He believes that the government should implement more funding to provide more meals for the students.

Analysis of Data with Mr. Glenn David:

After conducting this interview, it can be concluded that Mr. David is satisfied with the meals being served to these pupils since they are properly prepared by dietitians and nutritionists who adhere to the required standards to guarantee that the students receive a balanced meal. As previously stated in the literature found (*Report of the Auditor General of the Republic of Trinidad and Tobago on a Special Audit of the School Nutrition Programme Managed by the National Schools Dietary Services Limited*), there were concerns regarding wastage from students and lack of finances from the government. Based on the data collected from this interview, it can be concluded that as for food wastage, this is an issue amongst some of the students as they are not in favor of vegetarian meals. Regarding program enhancements,

Mr. David believes that the government should provide more funds so that a larger number of students can benefit.

Presentation of Data from Questionnaire:

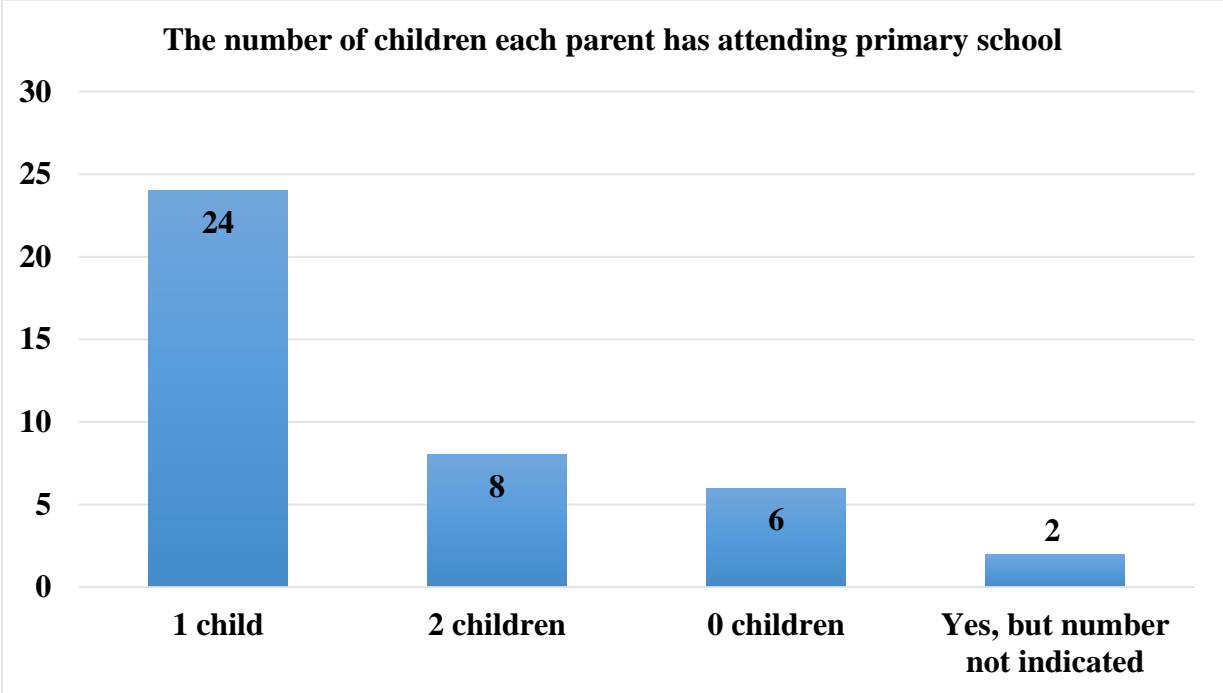


Figure 1: Column Chart showing the number of children each parent has attending primary school.

According to Figure 1, there are 24 parents with one child, 8 parents with two children, 6 respondents with no children, and 2 respondents who said they had children in primary school but did not specify how many.

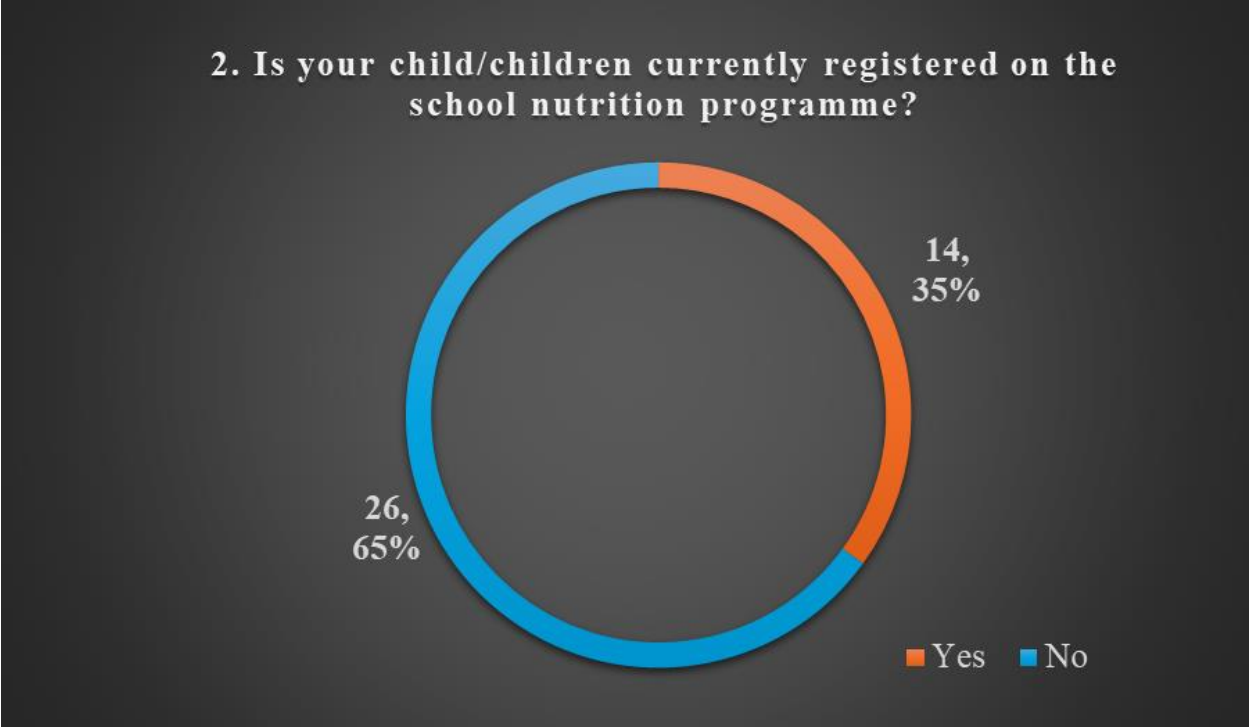


Figure 2: Pie Chart showing number of children registered under the school nutrition programme amongst the 40 respondents.

According to Figure 2, 35% of parents said their children benefit from the program, while 65% said their children are not enrolled in school nutrition. Some parents included a rationale for their choice in addition to their succinct one-word response. For those who said "yes," the benefits included convenience, less stress when choosing what to cook, and time savings while making lunch. For those who said "no", the responses included allergies to a variety of foods, dissatisfaction with the food provided, a preference for cooking at home, the ability to pay for meal preparation, and the employment of both parents.

3. If not, will you ever consider registering your child/children on this programme?

30 responses

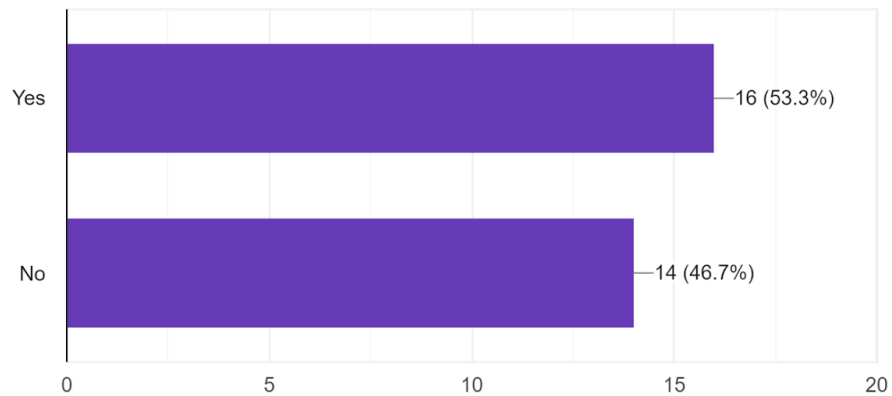


Figure 3: Bar Chart showing parents' views on considering the registration of their children for this programme.

Regarding the parents whose children are not currently enrolled in the school nutrition program, Figure 3 reveals that out of the 30 parents that responded to this question, 53.3% of them said they have no issue registering their children for the program, while 46.7% disagreed.

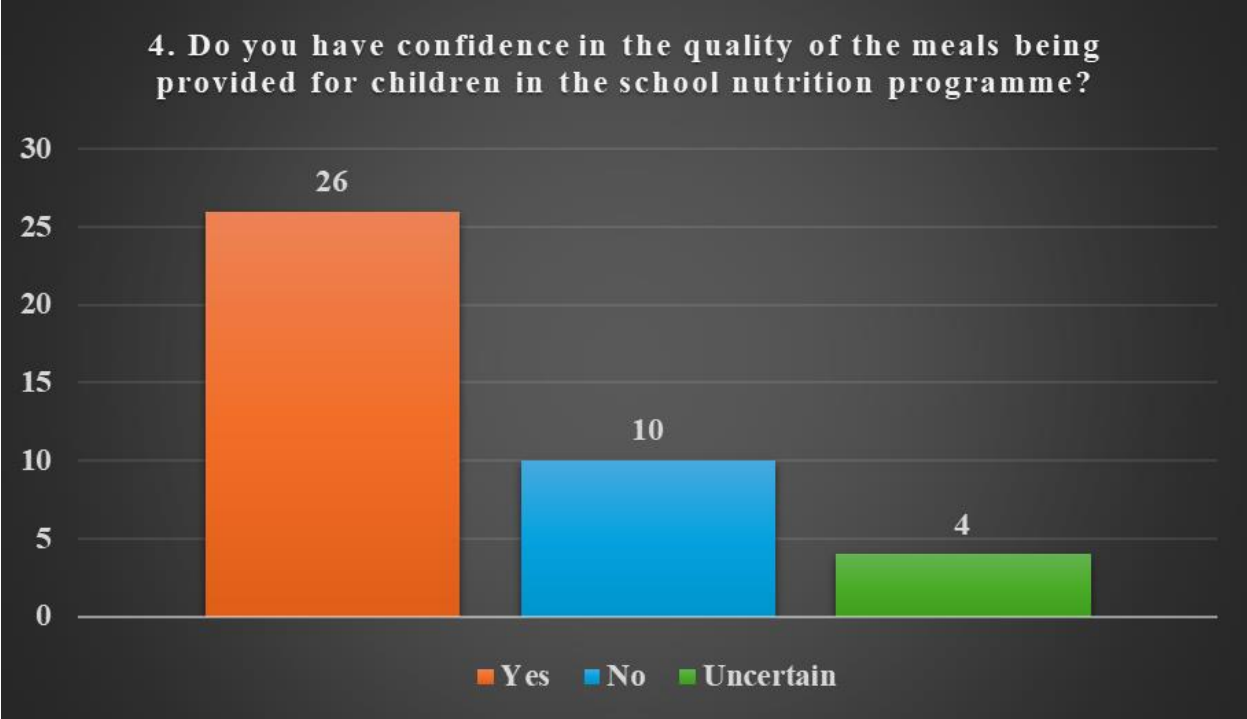


Figure 4: Clustered Column Chart showing the confidence of parents in the quality of meals being provided in the programme

Figure 4 shows that while 10 parents are unsure about the quality of the meals being served, 26 parents are satisfied with them. However, four of the respondents remain unsure. The fact that the parents have seen and tasted the food, that it is organized around good meal planning, and that the portion sizes are suitable for students are some of the justifications offered by those who support the quality of the meal. Additionally, they express gratitude for their children's hot and nutritious lunch, enjoy the variety of foods offered, and note that the meals are intended to be more nutrient-dense than what can be prepared at home. For those who are skeptical about the quality, their arguments stem from a personal encounter with a fly in their food and their

disapproval of hotdogs and cinnamon rolls given for breakfast. They are also uncertain regarding the method of cooking, the produce utilized, and the fact that the meals are not appealing.

13. As a child, were you registered under the school nutrition programme in primary school?
39 responses

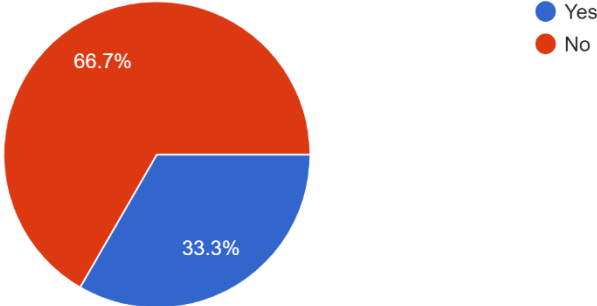


Figure 5: Pie Chart showing number of parents who were registered in the programme at primary school.

This question was designed to evaluate the number of parents who were meal receivers vs the number of parents who currently registered their children for the program in order to compare the enrollment rate of persons over time. Regretfully, only 33.3% of the thirty-nine parents have consumed the meals whilst 66.7% were not enrolled in this programme. For the thirteen parents that consumed the meals at their time in primary school, ten of them thought that the meals were well prepared, tasty, and balanced whilst three of them stated that they did not always enjoy what was prepared.

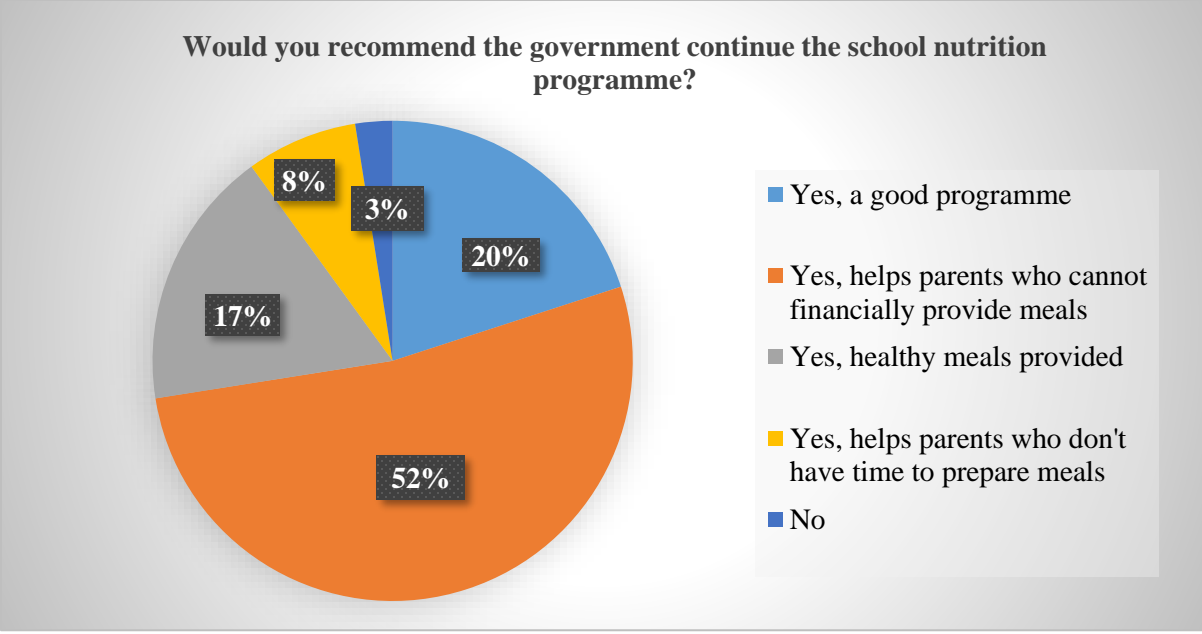


Figure 6: Pie Chart displaying the number of parents who support the programme's continuance and their justifications

According to this question, 39 of the 40 parents who answered the questionnaire said they were in favor of the program's continuation for a variety of reasons. 20% of the parents agree that it is a good initiative created by the government whilst 52% believe that its continuance is necessary as it helps those families that cannot afford to send their children to school with meals. In addition, 17% support its continuation because it gives children a nutritious, well-balanced meal, and 8% say it assists parents who lack the time to make meals.

Analysis of Data from Questionnaire:

This survey was designed to assess the efficacy of the currently in place initiatives, particularly the School Nutrition Programme, which aims to encourage wholesome eating practices in primary schools. While 65% of parents said their children are not enrolled in school nutrition, 35% of parents said their children presently benefit from the program. However, out of the 30 parents that responded to this question, 53.3% of them said they have no issue registering their children for the program, while 46.7% disagreed. For further background, 13 parents that consumed the meals at their time in primary school, 10 of them thought that the meals were well prepared and balanced at that time. Regarding confidence in the quality of the meals now provided to the children, 26 parents are content since they have seen and tasted the food, it is arranged according to appropriate meal planning, and the serving sizes are appropriate for the children.

As previously stated in the literature found (*Report of the Auditor General of the Republic of Trinidad and Tobago on a Special Audit of the School Nutrition Programme Managed by the National Schools Dietary Services Limited*), there were concerns regarding the actual impact of the program on the students. Overall, it can be stated that this programme was a good initiative created by the government of this country as not only does it provide balanced meals for children but, based on the data collected, 39 out of 40 respondents agree for its continuance as it helps parents who are unable to financially provide meals for their children, the meals are tasty and healthy and it relieves the burden of parents who lack the time to prepare meals. As for its criticisms, based on the review of parents, some stated that they disagree with the breakfast offerings and think that more should be done to make the meals more child friendly.

CHAPTER TWO: The benefits of healthy eating for students

In order to alter the habits of parents and students in Trinidad, the concept of healthy eating is crucial. Because of this, this questionnaire was also designed to collect information on the benefits of a healthy diet for children as well as the roles that parents play in emphasizing the value of a healthy diet to Trinidadian students.

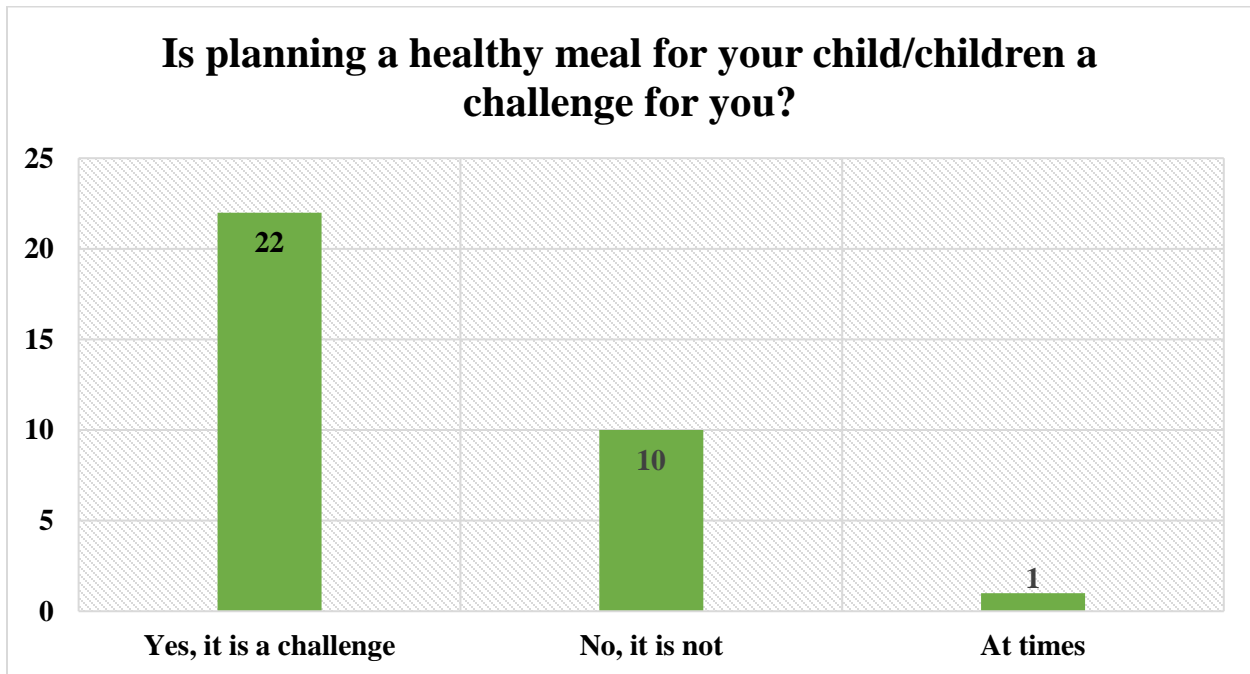


Figure 7: Clustered Column Chart showing the response of 33 parents regarding healthy meal planning for their children

Figure 7 demonstrates that, for 10 of the 33 parents who answered this question, organizing nutritious meals for their children is not a problem because they were raised on a diet rich in fruits and vegetables, they purchase fresh produce on a weekly basis, and they set a good example for their children by eating healthily themselves. Nonetheless, 22 parents find it difficult

to plan healthy meals because it is more expensive, their children are finicky eaters who do not enjoy eating healthy, and meal preparation takes time away from their professional life. One parent stated that at times it can be challenging to plan healthy meals.

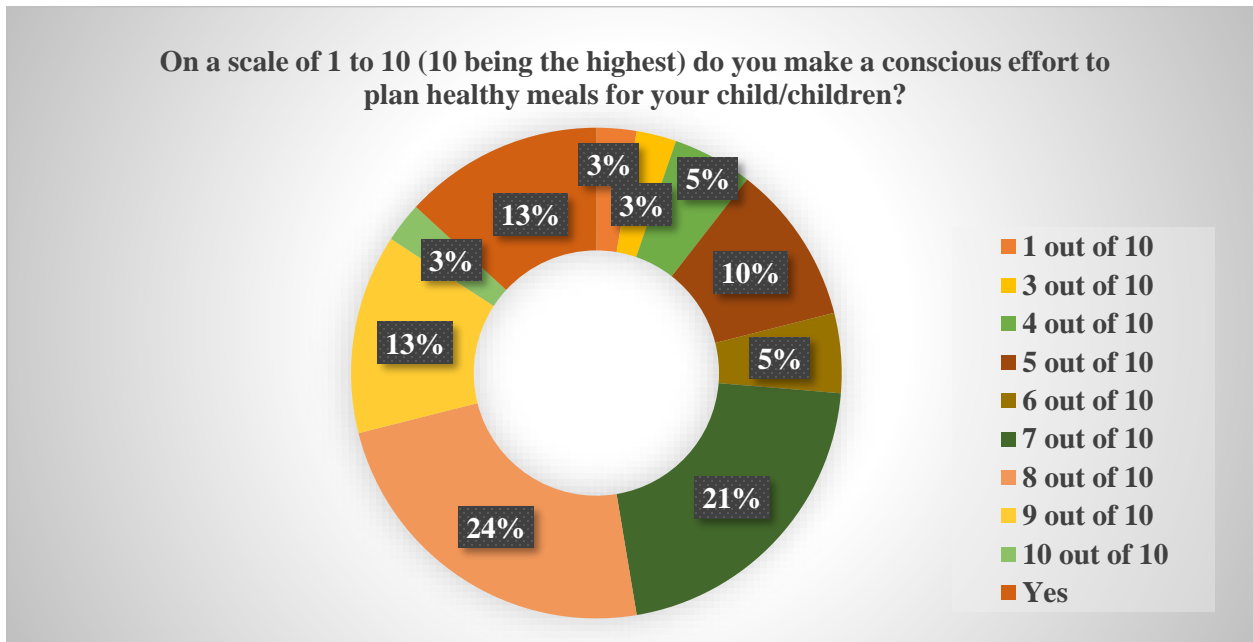


Figure 8: Pie Chart showing the effort parents make on a scale of 1 to 10 to plan healthy meals for their children

According to this pie chart, 38 out of the 40 respondents provided an answer when asked how much work they put into planning nutritious meals. Five parents acknowledged that they attempt, but they did not provide a figure on the range. One parent indicated 1 out of 10. One parent stated 3 out of 10. Two parents rated 4 out of 10. Four parents gave a five-star rating. Two parents cast six of ten votes. Eight parents indicated 7 out of 10. Nine parents stated 8 out of 10. Five parents rated 9 out of 10 and only one parent gave their effort a score of 10. These figures align with the preceding question since they show how many parents find it difficult to arrange nutritious meals and also emphasize those who do try.

7. How often do you include fruits in your child/children's diet?

40 responses

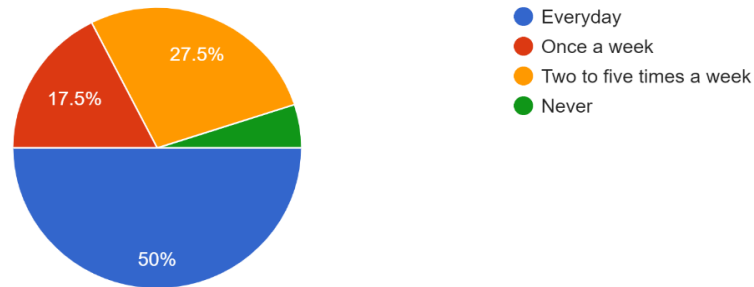


Figure 9: Pie Chart demonstrating how often parents include fruits in their children's diet

All 40 parents responded to this question. Twenty parents stated that they include fruits every day in their children's diet whereas eleven parents stated 2 to 5 times a week. On the other hand, seven parents indicated once a week and two parents stated that they never do.

8. If you did not select A in the answer above, what is the reason for your answer?

18 responses



Figure 10: Pie Chart showing the reason for parents not including fruits every day in their children's diet

For the parents that did not select every day in the previous question, figure 10 relates the reasoning for this of 18 parents. 50% stated that their children do not like fruits whereas 33.3%

indicated that fruits are too expensive. 11.1% of them stated that they lack the time to purchase fruits and 5.6% indicated that a fruit stall is not readily accessible.

9. How often do you include vegetables in your child/children's diet?

40 responses

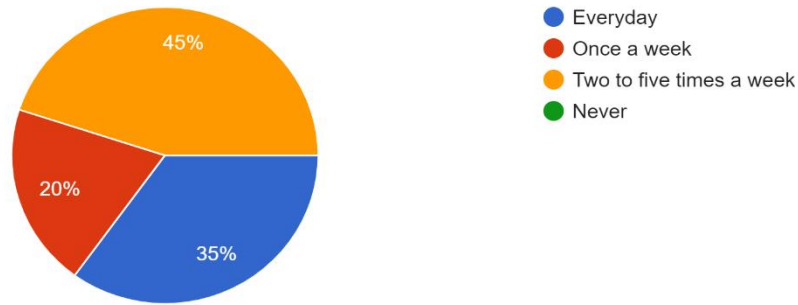


Figure 11: Pie chart showing how often parents include vegetables in their children's diet

While fourteen parents said they include vegetables every day, eighteen parents said they do it two to five times a week. On the other hand, eight parents include it only once a week.

10. If you did not select 'Everyday' in the answer above, what is the reason for your answer?

23 responses

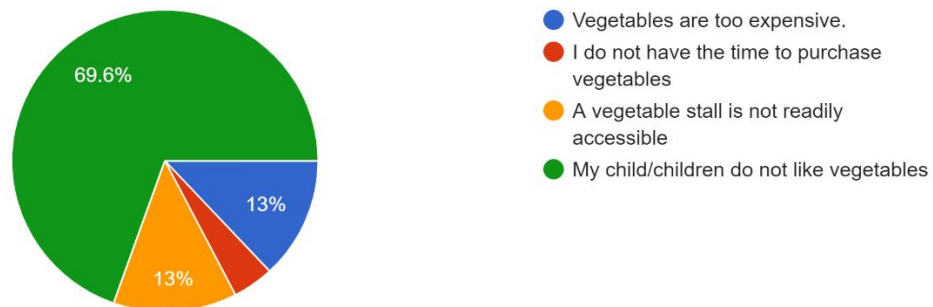


Figure 12: Pie Chart showing the reason for parents not including vegetables every day in their children's diet

Of the twenty-three parents who answered this question, 69.6% said their children do not enjoy vegetables, and 13% said they were too expensive. In cohesion with this, 13% of them also mentioned that a vegetable stall is not readily available and 4.3% lack the time to purchase them.

12. Which of the following do you think are benefits of healthy eating habits for children? (You are allowed to select more than 1 answer)

40 responses

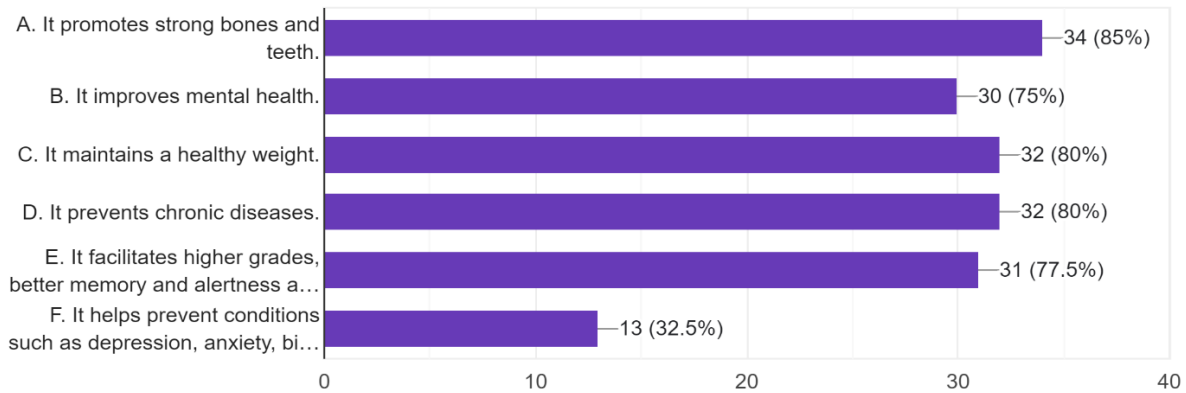


Figure 13: Bar Chart demonstrating parents' views on the impact of healthy eating habits on children

Based on this question, 85% of parents believe that healthy eating habits promote strong bones and teeth. As for maintaining a healthy weight and preventing chronic diseases, 80% of parents voted for these two options. In terms of facilitating higher grades, better memory, alertness, and information processing, 77.5% of the parents voted for this whereas 75% believe it helps improve the mental health of students. On the other hand, only 32.5% of parents believe that a healthier diet can prevent depression, anxiety, bipolar disorder, schizophrenia, and ADHD.

Analysis of Data:

Based on the data collected for this chapter, 22 parents find it difficult to plan healthy meals because it is more expensive, their children are finicky eaters, and meal preparation takes time away from their professional life. However, the 10 parents who said they enjoyed preparing healthy meals did so because their children were raised on a diet high in fruits and vegetables, they regularly bought fresh produce, and they themselves ate a balanced diet. As for the 38 parents who were required to indicate their effort into planning healthy meals for their children, only one parent rated 10 out of 10, suggesting that parents need to do more to encourage their children to eat healthily.

For the 20 parents that did not vote 'everyday' for including fruits in their children's diet, the main reason for 50% of the responses was that their children do not like fruits while the others stated that fruits are too expensive, they lack the time to purchase them or that a fruit stall is not readily accessible. In terms of vegetables, only fourteen parents include them in their children's diet every day, which shows that more effort is needed on the parents' behalf. The main reason for this coincides with fruits as majority of the parents stated that their children do not like vegetables. The other reasons involved cost of vegetables along with the fact that a vegetable stall is not readily available. These questions were included in the questionnaire in order to learn more about the parents' contributions to their children's adoption of good eating practices. It demonstrates that while some parents do try to encourage healthy eating, other aspects need to be considered, such as their children's dislike of fruits and vegetables, the cost, the unavailability of stalls, and the time it takes to buy them.

The findings on the benefits of a good diet for students is consistent with the research (Decker), as 85% of parents agree that maintaining a healthy weight and preventing chronic

diseases are two benefits of a healthy diet, while 80% agree that eating well promotes strong bones and teeth. Furthermore, 77.5% of parents agree with the research (Options) showing that eating a balanced diet improves memory, alertness, and information processing in addition to helping students achieve better academic results. Regarding the enhancement of students' mental well-being, 75% of parents concur with the research findings. However, the data differs from the literature (helpguidewp) in that only 32.5% of parents think that ADHD, bipolar disorder, depression, anxiety, and schizophrenia can be avoided by eating a healthy diet. The information acquired indicates that parents not only have a reasonable understanding of the advantages of good eating practices for their children, but also that they are unaware of the role that these practices play in preventing mental diseases.

CHAPTER THREE: Possible solutions to the issue of unhealthy eating in Trinidad

Charissa David, a final-year University of the West Indies student in St. Augustine who is pursuing a bachelor's degree in human nutrition and dietetics, was interviewed. The questionnaire was also created to collect suggestions from parents on how to lower obesity rates and encourage students in Trinidad to eat healthily.

Presentation of Data from Interview:

1. Make it mandatory that all cafeterias sell fruits
2. Reduce the amount of candy sold in primary schools
3. Make use of in-season fruits for menu items e.g. mango chow, portugal chow
4. Educate cafeteria workers on cooking habits that reduce excessive oil, fat, sugar
5. Incorporate vegetables into snacks made in the cafe e.g. adding carrots to the cheese paste in cheese puffs
6. Have class activities where teachers encourage children to eat healthy e.g. bring “your favourite fruit to school day” then draw the fruit
7. Make use of local vegetables (more affordable and sustainable) in breakfast and lunch dishes e.g. tomato choka and sada, bhagi rice and pigeon peas
8. Enforce school kitchen gardens: children learn to garden, and the cafeteria gets to use the vegetables for the meals

9. Only sell fried foods 2/3 times per week once an option that costs the same/similar can be replaced e.g. substitute aloo pie for cheese sandwich

10. Offer extra-curricular activities and incentives such as prizes for physical activity/play

Analysis of Data from Interview:

Charissa David, having experience within the field of meal preparation and healthy eating habits, has offered some creative ways to encourage healthy eating in schools. It focuses on the role the institution plays in promoting unhealthy eating. As such, it was recommended to better educate the teachers within the primary schools and the cafeteria staff by offering educational games for the students, changing the items offered on the menu at the cafeteria and including physical activity. In addition, incorporating locally grown fruits and vegetables would make it simpler to adopt good eating practices. In this manner, the children become more accustomed to the fruits and vegetables and the cafeteria owners save money on preparation.

Presentation of Data from Questionnaire:

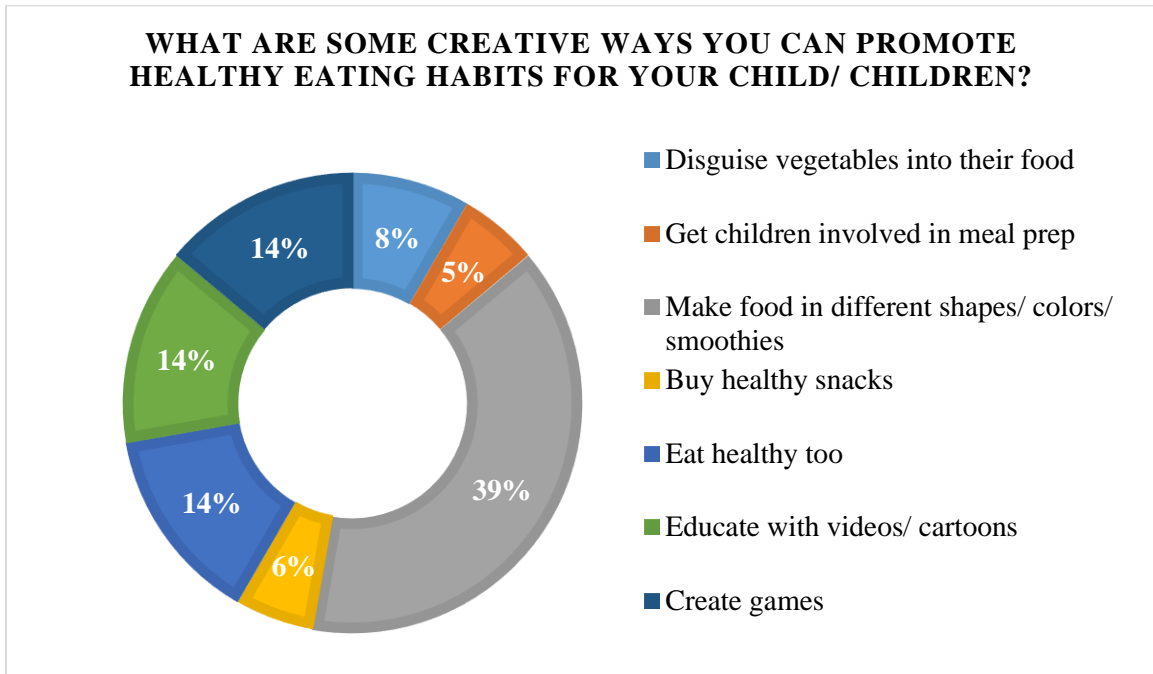


Figure 14: Pie Chart showing parents' ideas to creatively promote healthy eating habits

Based on the data collected, out of the 36 respondents to this question, 39% of parents believe that children would enjoy consuming healthy foods in different shapes, colors or even in a smoothie. Beside this, five parents indicated that they themselves have to eat healthily to set an example, five parents stated using educational videos and cartoons and five parents suggested creating games. In addition, 8% states to disguise the vegetables within their food, 6% indicated the purchase of healthy snacks and 5% responded the involvement of children in meal preparation.

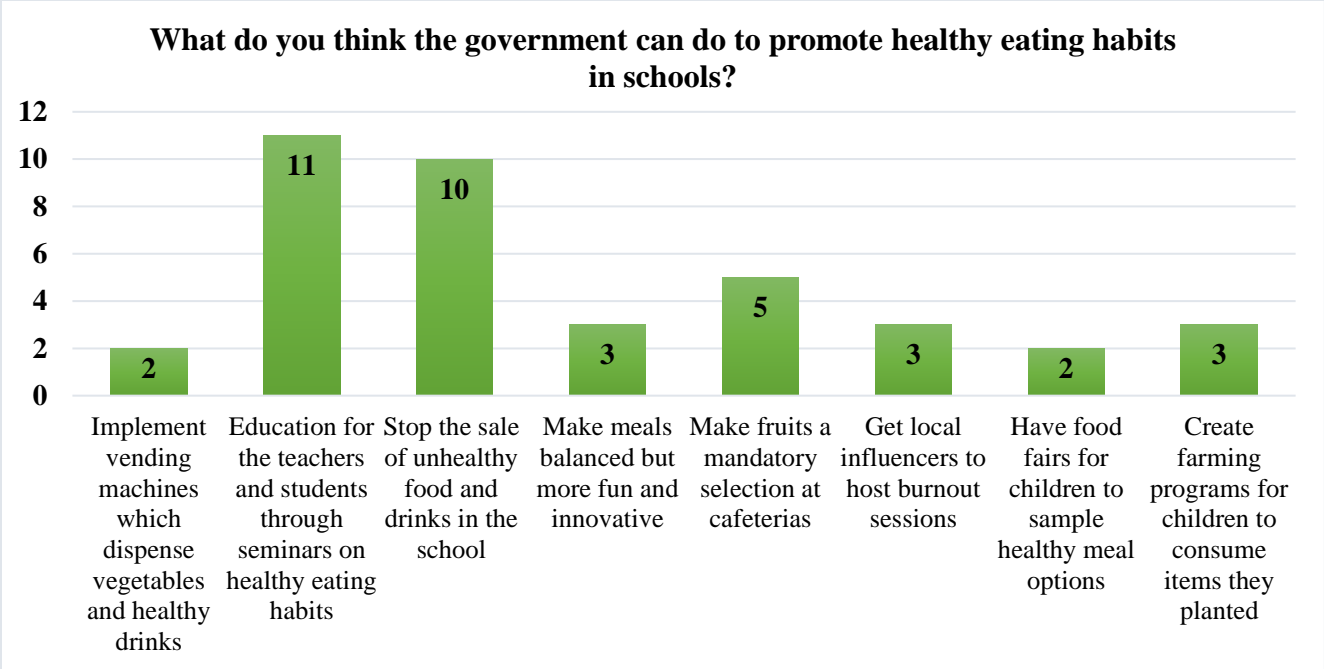


Figure 15: Clustered Column Chart displaying parental recommendations for further ways the government can further help with promoting healthy eating habits

As for figure 15, 39 out of 40 parents responded to this question. Eleven parents believe that education is needed so that both teachers and students can learn about healthy eating habits. Ten parents agree that there needs to be a ban on unhealthy food and drinks on the school compound. Five parents think that fruits should be mandatory at the cafeteria. Three parents stated that the government should continue providing balanced meals but make it more fun and innovative for the children. Three parents think that local influencers should host burnout sessions in schools. Three parents suggested the creation of a farming programme where the students plant items to consume. Two parents think that they should implement vending machines with healthy drinks and vegetables. Two parents believe that the children should be exposed to healthy meal options at food fairs.

Analysis of Data from Questionnaire:

Based on the data collected from the questionnaire for this particular chapter, it is evident that the parents who responded to this questionnaire are indeed aware of the various ways in which they themselves and the government can promote healthy eating habits within Trinidadian primary schools.

As for the ways to creatively promote healthy eating, parents believe that children would enjoy consuming healthy foods in different shapes, colors or even in a smoothie. This coincides with literature found as in this way the children would be consuming the rainbow of healthy foods (Options). Besides this, parents believe that children would be more inclined to try healthy foods if they saw their parents eating and preparing healthy meals. This idea also coincided with the literature found (helpguidewp) as parents are role models for their children. In addition, they stated that using educational videos, cartoons or even creating competitive games would help the children to eat healthily. Some also believe that parents can try to disguise the vegetables within their children's food. Lastly, some suggested to begin purchasing healthy snacks at the supermarkets and having the children involved in meal preparation at home. The final two suggestions coincided with the literature found (Decker).

In relation to the role the government can further play in promoting healthy eating, besides the School Nutrition Programme, thirty-nine out of forty parents made suggestions. Parents believe that education is needed so that both teachers and students can learn about healthy eating habits. Also that the government needs to put a ban on unhealthy food and drinks at primary schools. This aligned with the existing literature (Kowlessar). In addition, parents stated that fruits should be mandatory at the cafeteria. Some parents, however, argued that while

the government should still provide healthy meals, it should be conducted in a way that is more engaging and creative for the children. Some think that local influencers should host burnout sessions in schools to promote physical activity. This also related to the literature found (Francis-Granderson and McDonald). They also recommended starting a gardening program where children grow food to eat; this would teach them about eating healthily in a fun way. Lastly, parents believe that in order to expose children to a variety of healthy food alternatives, the government should hold food fairs and install vending machines with vegetables and healthy drinks. This was also seen in the literature found (“#ActOnFacts! – the Food in Schools Matters Launch of Groundbreaking Campaign to Get Healthy Food Policies in Our Schools”).

CONCLUSION

Based on the comprehensive exploration of healthy eating habits in Trinidadian schools presented in Chapters 1, 2, and 3, it is evident that there is a critical need for enhanced initiatives to promote nutrition education and improve dietary practices among students. Chapter 1 evaluated the current programs, particularly the School Nutrition Programme, highlighting both successes and areas for improvement. While these initiatives have made strides in raising awareness about healthy eating, there remains a gap in translating knowledge into sustained behavior change among students.

The advantages of a nutritious diet for students were emphasized in Chapter 2, where it was noted how nutrition has a significant influence on students' academic achievement, physical health, and general well-being. This section highlights the value of establishing lifetime healthy eating habits early on by outlining the advantages of a balanced diet. The results also showed that a large number of students still struggle with making poor nutritional decisions, which highlights the urgent need for focused interventions.

Chapter 3 delved into potential solutions to address the issue of unhealthy eating in Trinidadian schools, offering a guide for actionable steps to promote healthier food environments and empower students to make informed choices. Through the involvement of many stakeholders such as parents, educators, and the government, these solutions aim to initiate a comprehensive strategy to counteract the widespread occurrence of unhealthy eating habits.

In conclusion, the synthesis of findings from Chapters 1, 2, and 3 underscores the urgency of prioritizing nutrition education and fostering a culture of health within Trinidadian schools. Parents, teachers, and the government can work together to design interventions that

empower students to make healthier choices and increase knowledge of the value of eating healthily by utilizing the insights gained from this research. Ultimately, the success of these initiatives depends on a persistent dedication, teamwork, and a common goal of enhancing the wellbeing of young people in Trinidad and Tobago by encouraging the development of healthy eating habits.

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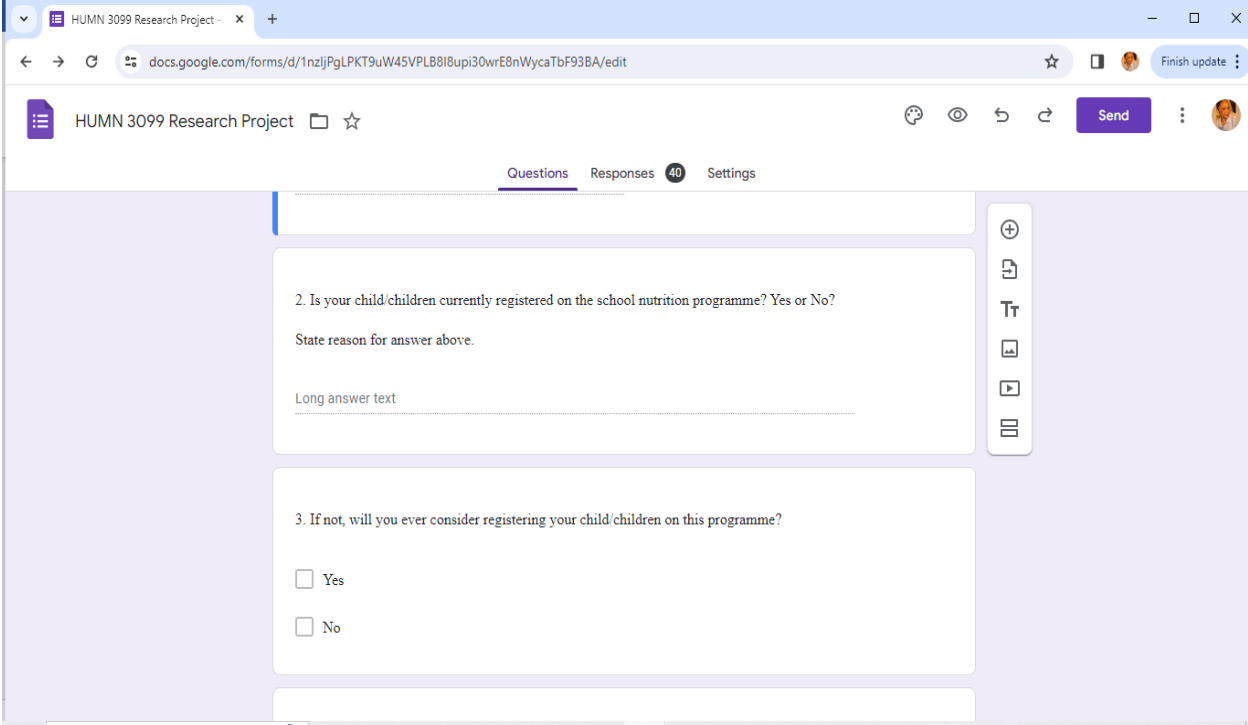
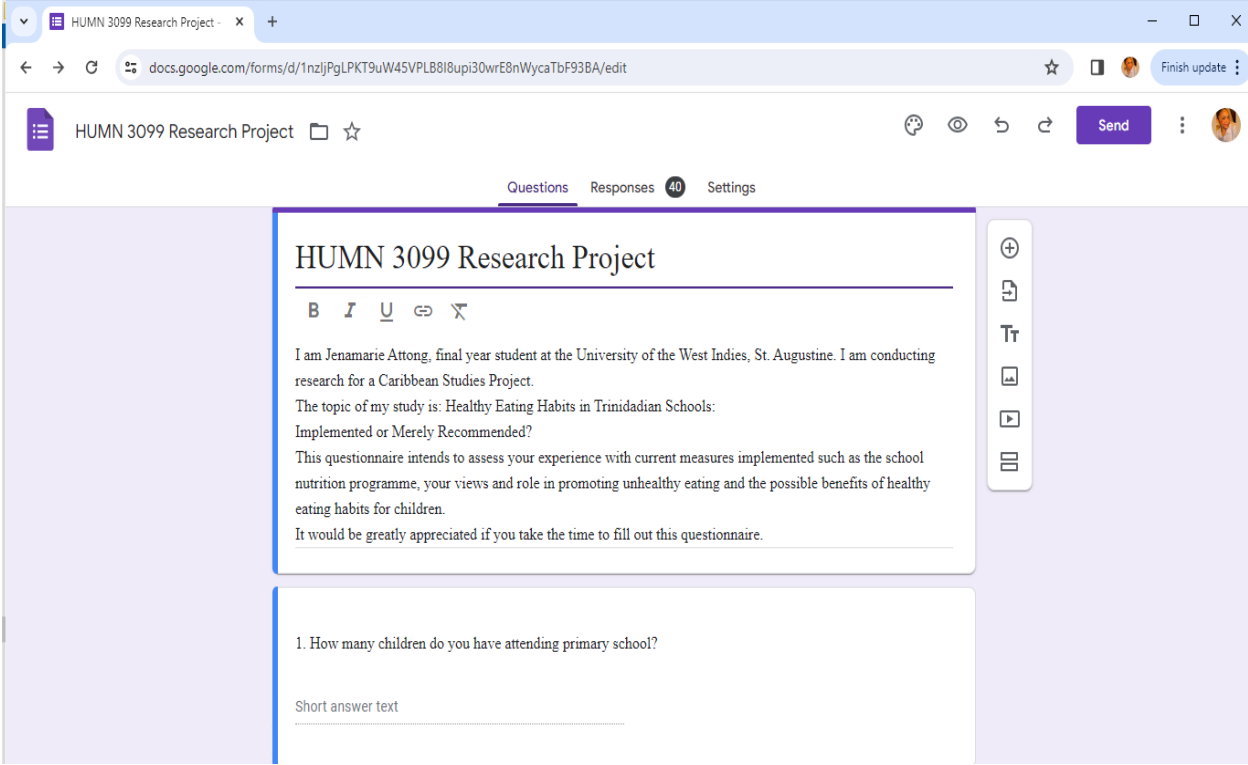
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APPENDIX A

INTERVIEW WITH MR. GLENN DAVID:

1. What is your role within the school feeding program?
2. How often do you deliver lunches to schools and to how many schools?
3. Do you know the number of students that benefit from these deliveries on a daily basis?
4. Who/ which type of students mainly partake in the school feeding program?
5. Would you say that the lunches provided are sufficient to fulfill students' needs?
6. What are the types of lunches that are provided?
7. Would you say that the students appreciate this initiative from the government or is the food wasted?
8. Why do you think there is so much wastage of these lunches on a daily basis?
9. What do you think the government can do to change the program?
10. How do you think the program can promote healthier eating habits for these students?

APPENDIX B: Questionnaire



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HUMN 3099 Research Project

Questions Responses 40 Settings

4. Do you have confidence in the quality of the meals being provided for children in the school nutrition programme? Yes or No

State reason for your answer

Long answer text

5. Is planning a healthy meal for your child/children a challenge for you? Yes or No

State reason for your answer

Long answer text

HUMN 3099 Research Project - x +

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HUMN 3099 Research Project

Questions Responses 40 Settings

6. Overall, on a scale of 1 to 10 (10 being the highest) do you make a conscious effort to plan healthy meals for your child/children?

Short answer text

7. How often do you include fruits in your child/children's diet?

Everyday

Once a week

Two to five times a week

Never

HUMN 3099 Research Project - x +


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HUMN 3099 Research Project

Questions Responses 40 Settings

8. If you did not select A in the answer above, what is the reason for your answer?

- Fruits are too expensive
- I do not have the time to purchase fruits
- A fruit stall is not readily accessible
- My child/children do not like fruits



HUMN 3099 Research Project - x +


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HUMN 3099 Research Project

Questions Responses 40 Settings

9. How often do you include vegetables in your child/children's diet?

- Everyday
- Once a week
- Two to five times a week
- Never



HUMN 3099 Research Project

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HUMN 3099 Research Project

Questions Responses 40 Settings

10. If you did not select 'Everyday' in the answer above, what is the reason for your answer?

- Vegetables are too expensive.
- I do not have the time to purchase vegetables
- A vegetable stall is not readily accessible
- My child/children do not like vegetables

11. What are some creative ways you can promote healthy eating habits for your child/ children?

Long answer text

HUMN 3099 Research Project

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HUMN 3099 Research Project

Questions Responses 40 Settings

12. Which of the following do you think are benefits of healthy eating habits for children?
(You are allowed to select more than 1 answer)

- A. It promotes strong bones and teeth.
- B. It improves mental health.
- C. It maintains a healthy weight.
- D. It prevents chronic diseases.
- E. It facilitates higher grades, better memory and alertness and faster information processing.
- F. It helps prevent conditions such as depression, anxiety, bipolar disorder, schizophrenia, and ADHD.

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HUMN 3099 Research Project

Questions Responses 40 Settings

F. It helps prevent conditions such as depression, anxiety, bipolar disorder, schizophrenia, and ADHD.

13. As a child, were you registered under the school nutrition programme in primary school?

Yes

No

14. If yes, what do you think of the meals provided during your time at primary school?

Long answer text

HUMN 3099 Research Project - x +

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HUMN 3099 Research Project

Questions Responses 40 Settings

15. Would you recommend the government continue the school nutrition programme?

Yes or No

State the reason for your answer.

Long answer text

16. What do you think the government can do differently in the implementation of the school nutrition programme?

Long answer text

Long answer text

17. What do you think the government can do to promote healthy eating habits in schools?

Long answer text

APPENDIX C

Interview with Charissa David:

1. What level are you at in the University of the West Indies, St. Augustine?
2. In what area is your degree?
3. What do you think are some benefits of healthy eating? Especially for primary school children?
4. Can you think of any solutions to poor eating habits in Trinidad?
5. Do you think these suggestions can work for a Caribbean island like Trinidad?

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