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A CHILDREN'S BOOK ABOUT AFRICAN AMERICAN AND MEXICAN AMERICAN CULTURAL FOODS AND HEALTHY EATING TITLED *OUR FOOD IS HEALTHY TOO!*

By

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B.S.F.C.S., University of Georgia, 2021

A Master's Project Submitted to the Graduate Committee in the Department of Nutrition at Georgia State University in Partial Fulfillment of the Requirements for the Degree

MASTER OF HEALTH SCIENCE

ATLANTA, GEORGIA

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Introduction

Nutrition education is a vital part of a comprehensive health education program and encourages children to make healthy food and beverage choices.¹ Shariff and colleagues conducted a nutrition education intervention based on Social Cognitive Theory among primary schoolchildren and found that the children significantly improved in nutrition knowledge and healthy dietary practices after the intervention.² Students in the United States receive less than eight hours of required nutrition education each school year.¹ The number of hours needed for a behavioral change is 40 to 50. Therefore, eight hours is insufficient.¹ Nutrition education can help prevent nutrition related diseases by increasing children's knowledge regarding healthy eating choices.¹ A study demonstrated that a short-term and age appropriate nutrition education intervention capturing cultural food preferences had the potential to increase nutrition knowledge and self-efficacy.¹ African American and Hispanic children are at a higher nutritional risk, often having higher rates of obesity and chronic diseases, such as diabetes, hypertension, and cardiovascular disease.³ In comparison to Whites (4.5), incidence of type 2 diabetes was significantly higher among African American (37.8) and Hispanic (20.9) children and adolescents in the United States between 2014 2015.⁴ Providing children with books that cater to their culture and nutritional needs could increase their literacy and healthy eating choices⁵.

Food involves culture and plays a vital role in nutrition. Culture and ethnicity impact diet and can affect one's health. Childhood obesity is an issue that is disproportionally affecting minorities such as African Americans and Hispanics.³ There are many contributors to why this may be, and there are interventions to address this issue. Research has shown that nutrition education interventions that are culturally relevant can have promising results, such as improving self-efficacy and choosing healthier eating choices.^{1, 5} Research has also shown that a balanced

diet can help prevent or manage childhood obesity.⁶ There is a need for books that specifically address African American and Hispanic cultural foods and healthy eating. An Amazon search on healthy eating children books involving culture ages 6 to 12 produced 30 results.6 Out of the books that do address culture and healthy eating, only a few focus specifically on African American and Mexican American cultural foods. When looking for books in the area, the results are limited, and this population is not properly targeted. Using a children's book as an educational tool can be a fun way to help children learn more about having a balanced diet. The aim of this project is to create a children's book about African American and Mexican American cultural foods and healthy eating.

Literature Review

Dietary Guidelines for American children ages 2-18

The Dietary Guidelines for Americans (DGA) provide advice on what to eat and drink to meet nutrient needs, promote health, and prevent disease.⁸ The guidelines are released every five years and reflect current evidence-based research surrounding nutrition. The most recent edition is the *Dietary Guidelines for Americans, 2020-2025.*⁸ The guidelines give details about the nutrition requirements for different age groups. The target audience for this project is second to fourth grade elementary students, and they are a part of the children and adolescents' group, including individuals ages 2 through 18. Based on a 2,000-calorie diet, it is recommended that children between 5-12 years of age consume 2 ½ cups of vegetables, 2 cups of fruit, 6 ounces of grains, 2 ½ cups of dairy, 5 ½ ounces of protein, and 24 grams of oil daily.⁸ According to the DGA, children ages 5-8 and 9-13 do not meet the recommendations in a number of ways.

Children in both age categories fall short of vegetables, fruits, and dairy. Protein is met between both groups. Children 5-8 consume over the recommended grain recommendation and children 9-13 are meeting the grain recommendation.⁹ Most of the grains the 5-8 group are consuming are processed grains instead of whole grains.⁹ It is recommended that Americans make half of their grain's whole grains, so this is an issue.⁸ Between 2001 and 2010, consumption of sugarsweetened beverages among children and adolescents decreased, but still accounts for 10% of total caloric intake.¹⁰ Empty calories from added sugars and solid fats contribute to 40% of daily calories for children and adolescents age 2-18 years.¹⁰ Approximately half of these empty calories come from six sources: soda, fruit drinks, dairy desserts, grain desserts, pizza, and whole milk.¹⁰ The 5-8 and 9-13 age group's typical dietary patterns demonstrates their lack of a healthy balanced diet.

Children's books on cultural eating in African and Mexican American Cultures

An Amazon book search on "food children's books" ages 6-12 produces 20,000 results.¹¹ An amazon search on "food and culture children's books" ages 6-12 produces over 1,000 results.¹² An Amazon search of "healthy eating children book" ages 6 to 12 produced over 1,000 results.¹³ For comparison, an Amazon search on healthy eating children books involving culture ages 6 to 12 only produced 30 results.⁷ Out of the books that do address culture and healthy eating, only a few focus specifically on African American and Mexican American cultural eating. Based off these results, a book about healthy eating surrounding African American and Mexican American cultural food for children is needed.

The Role of Culture in Nutrition

Culture consists of values, attitudes, habits, and customs acquired by learning.¹⁴ Culture can influence the foods you eat, and cultural foods help fulfill vital social roles. Culture and ethnicity impact diet, which can result in changes in health. Due to this, people's choices and selections of food vary significantly. Different cultures may encourage or frown upon the consumption of different foods by individuals who belong to their groups.¹⁵ For example, in the Hindu and Buddhist religions the consumption of pork and beef is frowned upon. Food is more than energy and nutrients for our bodies. Food also has an influence on how we interact with one another, and our everyday lives. Knowledge gained through the life sciences influences individual and cultural approaches to food and contributes to an increased intellectual and rational attitude towards food.¹⁶The literature^{14, 16} shows that culture has a very impactful role in nutrition; we cannot talk about food without talking about culture.

Statistics on Childhood Obesity and Minority Populations

Childhood obesity is a significant issue being faced in the United States. For children and adolescents aged 2-19 years in 2017-2018, the prevalence of obesity was 19.3% and affected about 14.4 million children and adolescents.³ Obesity prevalence was 25.6% among Hispanic children, 24.2% among non-Hispanic Black children, 16.1% among non-Hispanic White children, and 8.7% among non-Hispanic Asian children.³ Minorites are being impacted the most by obesity.³ According to the Center for Disease Control and Prevention, children with a body mass index (BMI) in the 85th to 95th percentile are overweight, and obese children are in the 95th percentile or above.¹⁷ Many factors are believed to contribute to a child's risk of becoming obese. These risk factors include behavioral, environmental, and economic contributors. Socioeconomic status and food availability are two main aspects that influence childhood obesity in African American and Hispanic youth.¹⁸ One possible approach to influencing the dietary patterns of minorities such as African Americans and Mexican Americans, is to provide nutrition education surrounding healthy eating by highlighting foods that align with their cultural food preferences.

Childhood Obesity and the Benefits of a Balanced Diet

During childhood, unhealthy eating habits have been associated with nutrition-related non-communicable diseases such as obesity.⁶ These eating habits typically consist of higher intakes of snacks high in sodium and sugar. An adequate nutritional intake of vitamins and minerals, whole grains, milk, dairy products, fruits, and vegetables in a balanced diet has been found to prevent and manage childhood obesity.⁶ The United States Department of Agriculture (USDA) created MyPlate, an easy-to-follow guide to demonstrate nutritious, balanced meals.¹⁹ The plate is divided into sections for vegetables, fruits, grains, and foods high in protein. It is

essential to teach children the importance of eating a nutritionally balanced meal. Lack of education and knowledge can be a factor contributing to childhood obesity.⁶ Ensuring that children are provided with knowledge about making healthy choices could positively impact their health.

Interventions Using Culturally Relevant Nutrition Education to Promote Healthier Eating

Culturally competent strategies incorporated into practice can impact the development of childhood obesity.⁵ Interventions were designed for minority children and youth identifying specific effective cultural strategies. One cultural strategy proposed the inclusion of the immediate and extended family in all nutrition activities and programming done in schools and community settings.²⁰ Another strategy is promoting nutrition education delivered by someone of same race who had overcome a weight problem.²¹ Using education materials that depict individuals from ethnic backgrounds is an additional intervention that has the potential of lowering childhood obesity rates amongst African American and Latino youth.²² Researchers argue that culturally competent interventions hold promise for improving the delivery and effectiveness of obesity prevention strategies targeting racially diverse populations.⁵ It is believed that culturally competent obesity interventions can increase acceptability and efficacy that can positively affect children.⁵

Another study focused on the implementation of a cultural and age-sensitive nutrition education intervention to increase knowledge and self-efficacy and promote healthy eating among children.¹ The program consisted of cooking demonstrations, food-related games, and food tasting in addition to the nutrition lessons. The elementary school selected for this project had a high proportion of Hispanic and African American students. The food items and ingredients used for the cooking experience and demonstrations captured cultural food

preferences.¹ A pre-posttest study design was used to assess the impacts of the curriculum. A significant increase in mean nutrition knowledge was found after the intervention.¹ The results demonstrated a short-term and age-appropriate nutrition education intervention that includes cultural food preferences could increase nutrition knowledge and self-efficacy.¹ Interventions such as this one could lead to children making healthier food choices.

Learning through Reading for Young Children

There are different genres of books for young children to read. The list includes Board Books, Picture Books, Picture Storybooks, Easy Readers or Beginning readers, Chapter Books, Middle-Grade Novels, and Young Adult Novels.²³ After reviewing the categories and based on my target audience of second to fourth grade elementary students, my book will be a picture storybook. Picture Storybooks are a level higher than Picture Books. Picture Books are for readers between 4 and 8 years old and have between 400-900 words.²³ A Picture Storybook can be over 900 words and tend to have a higher vocabulary level, but it is still aimed towards the 4 to 8 years old group. The main difference is picture storybooks focus more on text to explain the content and use illustrations to grasp the reader's attention.

There are a lot of benefits associated with children reading and reading to children. Reading is a great learning tool for young children. The more children read, the more their reading skills strengthen. Reading exercises the brain and can improve concentration.²⁴ As children read, they learn new words and take in information on how to structure sentences and use words when writing or speaking.²⁴ Children can also learn a lot about the world around them, including people, places, and events. Learning through reading is an excellent strategy for a child to understand a new concept or topic.

Using children's books to teach nutrition education is a fun way to teach a child about nutrition without overwhelming them with information. Children's books can also be an excellent resource for the whole family to enjoy. With the help of engaging characters and stories about healthy foods, kids can positively learn nutrition. It is crucial to have books focused on healthy eating available for children in the classroom. Research shows that nutrition education can teach students how a healthy diet influences emotional well-being and how emotions may influence eating habits.¹

Methods and Outcomes

Book Text and Illustrations

In order to publish this book, I will conduct extensive research on self-publishing a book through Amazon. To develop this book, I will complete a text planning rough draft on paper. I will utilize pen, pencil, and color pencils to illustrate my ideas on 8.5 by 11-inch white paper. I will prepare a second draft using the computer. I will use Microsoft Word software to produce my second draft. Each sheet will be equal to one page and will contain the words and images for the book. I will roughly sketch the images of the book for the second draft. I will keep editing the document until I am satisfied with the final draft.

Prior to publishing through Amazon, I will first use the software Fiverr, a marketplace for digital services, to hire someone to properly edit, format and proofread the book. Next, I will hire an illustrator through the same software Fiverr. I have picked out 10 potential children book illustrators. Through the software I am able to view their work and set up meetings to discuss our ideas. Price and quality of work will be considered for the final selection of the illustrator. The cost for the illustrator and editor will not exceed \$100.

Publishing

To publish this children's book, I will go the self-publishing route. Amazon offers the possibility to self-publish eBooks and paperbacks for free with Kindle Direct Publishing (KDP). First, I will set up my free Kindle Direct Publishing account. Next, I will create a book description so potential buyers will be able read what the book is about. I will then choose keywords such as, "Children", "Nutrition", "Cutlture", "Mexican American", "African-American", "Healthy Eating", and "Myplate" so the book will show up in Amazon and Google search engines. Next, I will select the categories for the book type. Finally, I will upload the book to Amazon, including the manuscript and book cover. After researching similar books in the 6-8 ages category on Amazon, I will price the book at \$12.99 for the paperback and \$14.99 for the hardcover. The ebook will be free.

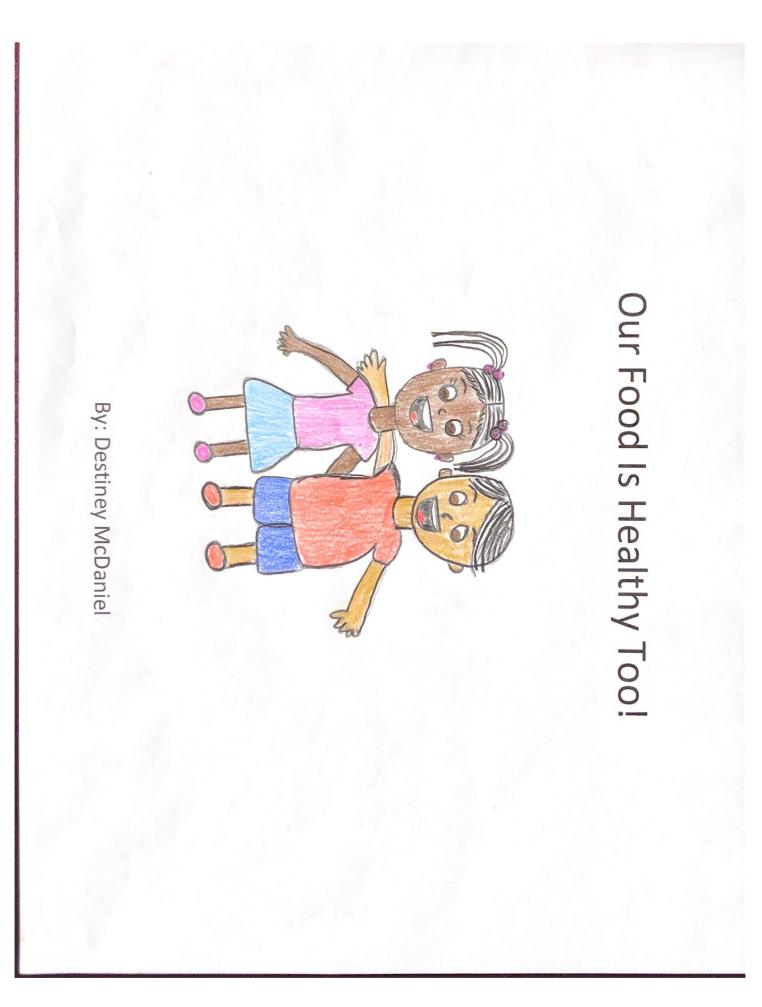
To calculate the paperback's printing cost, this formula is used: Fixed cost + (page count * per page cost) = printing cost. The printing cost for the paperback will be \$3.65 per book. For Hardcover, the cost will be \$5.50 per book. KDP prints your book on demand and subtracts your printing costs from your royalties. Through KDP I can obtain up to 70% royalties from my book. Marketing

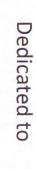
Once the book is uploaded on Amazon, I will start marketing through social media routes: Instagram, LinkedIn, and Facebook. I will advertise the book to the Family Resource Center in Rome, GA and the different African American and Hispanic churches in Rome, GA and surrounding areas. I will also reach out to the teachers at the different elementary schools in the area. I will email my previous universities, The University of Georgia and Georgia State

University. I will also send an email to the organizations Diversify Dietetics and Black dietitian's matter.

Outcome Document Our Food Is Healthy Too!

Book Prototype:





-

600

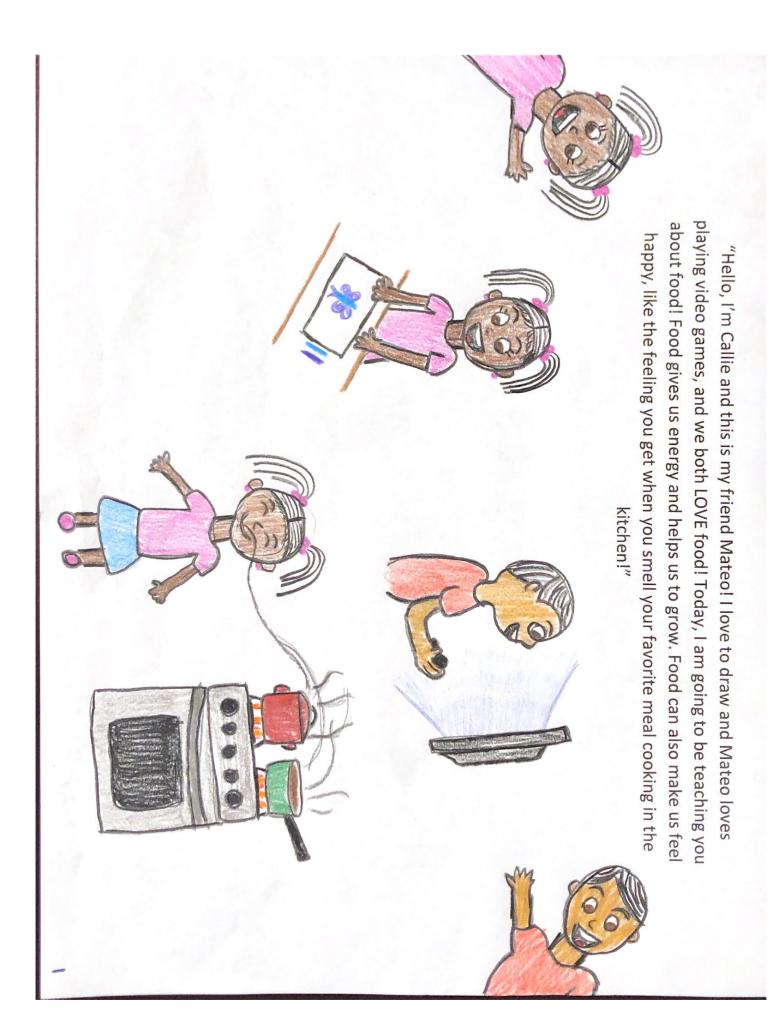
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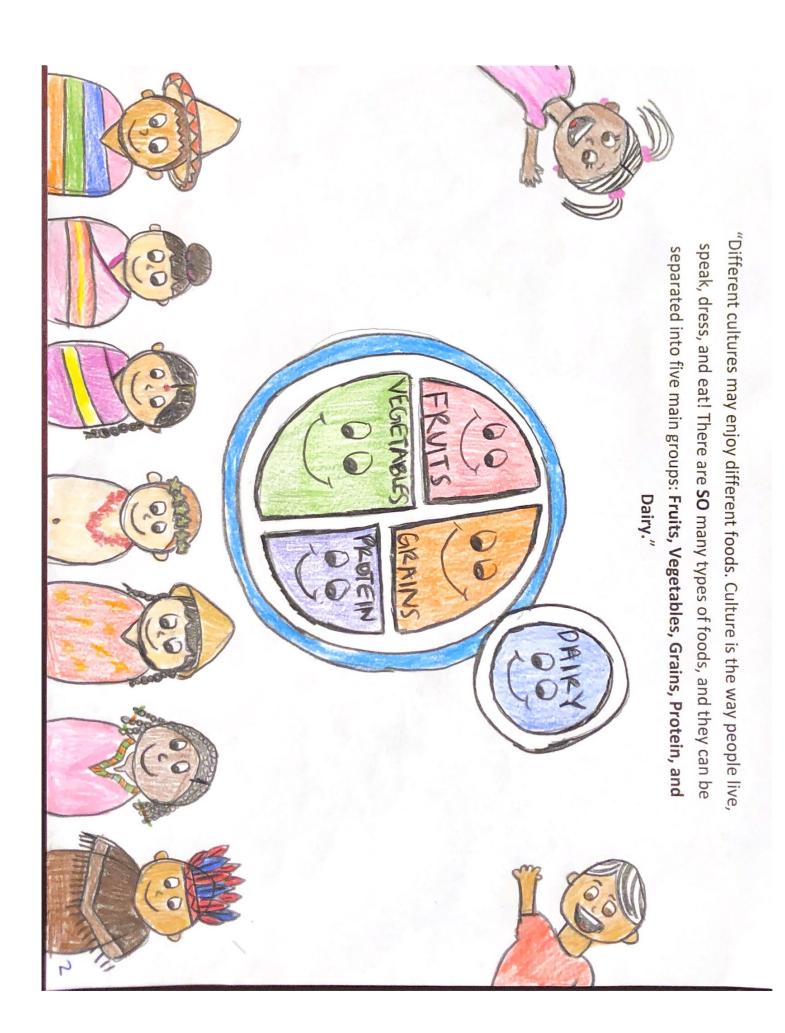
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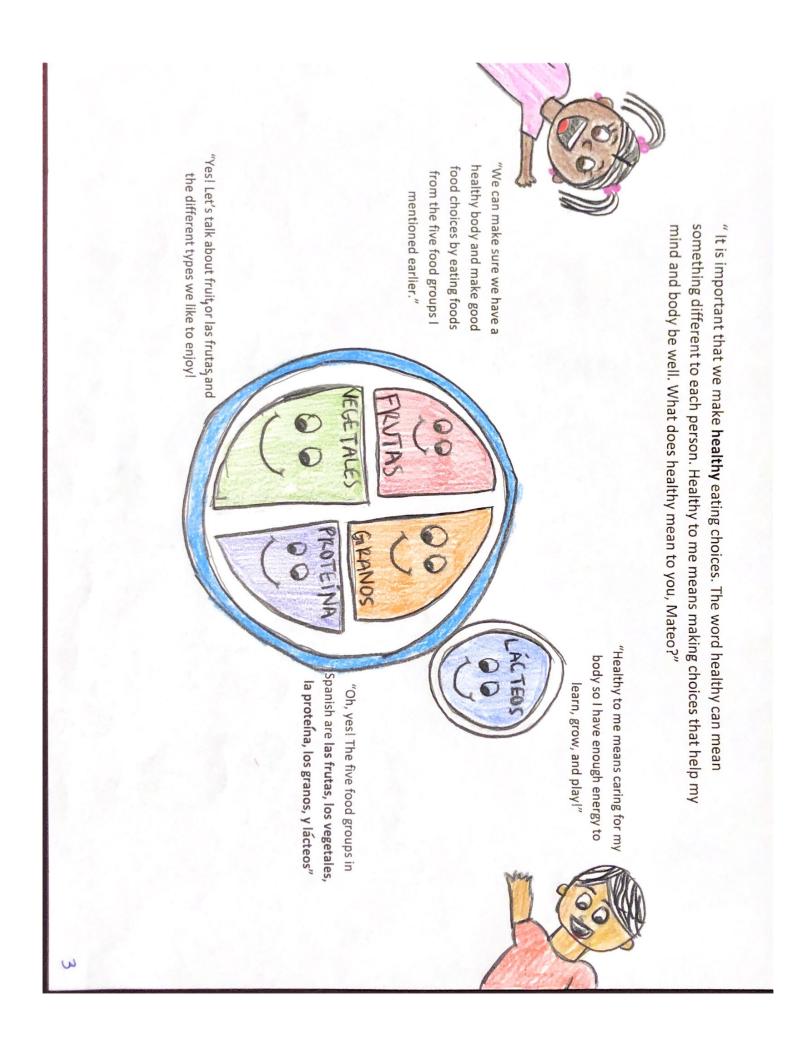
My mom and dad, Derrick and Catasha McDaniel

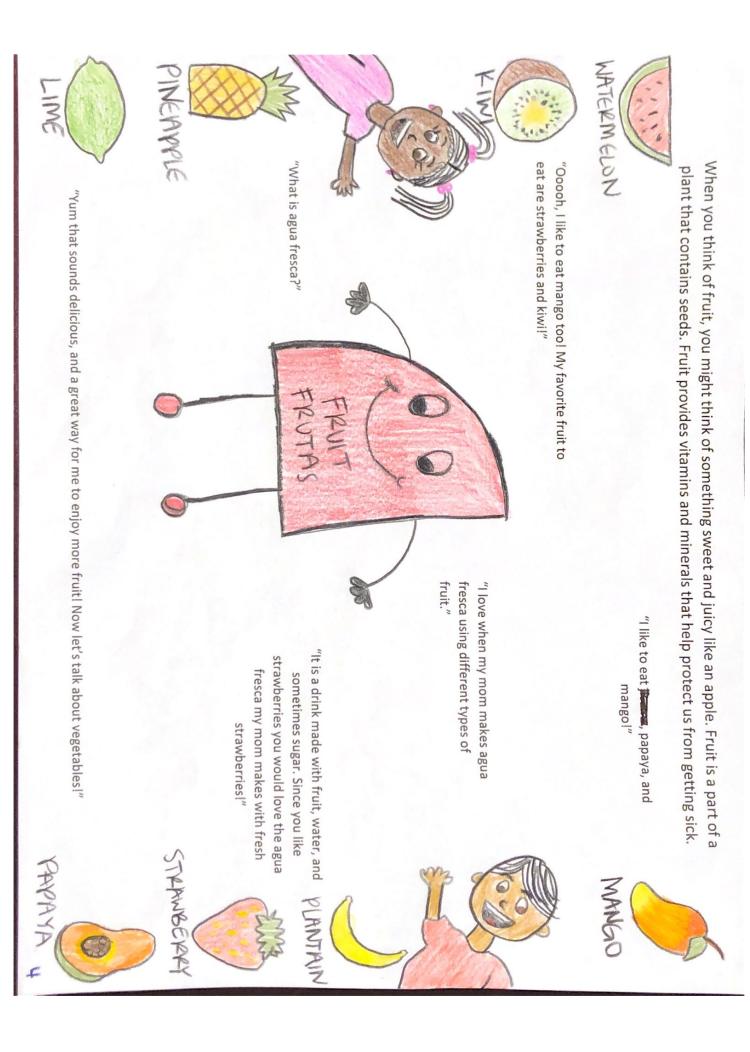
Love, Destiney

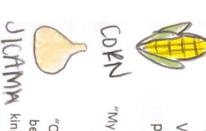
6 P











"When you hear the word vegetable things like carrots, broccoli, and lettuce probably pop into your mind. provide different vitaming and minerals that help us grow!" Vegetables are the leaves, stems, roots, or other parts of plants that people eat. Vegetables, like fruit, also

"My mom makes vegetables when she makes soul food!"

JICAMM kind of food that many African Americans like meyeat here because it's good for the soul. He explained that it is the "One day I asked my dad and he said it's called soul food in the South."

"What is soul food?"



ARP

"Oh, I get it! So, what we does your mom make?"



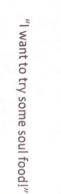
sweet and the collard greens are potatoes. The yams taste really collard greens. Yams are sweet "My mommy makes yams and good too!

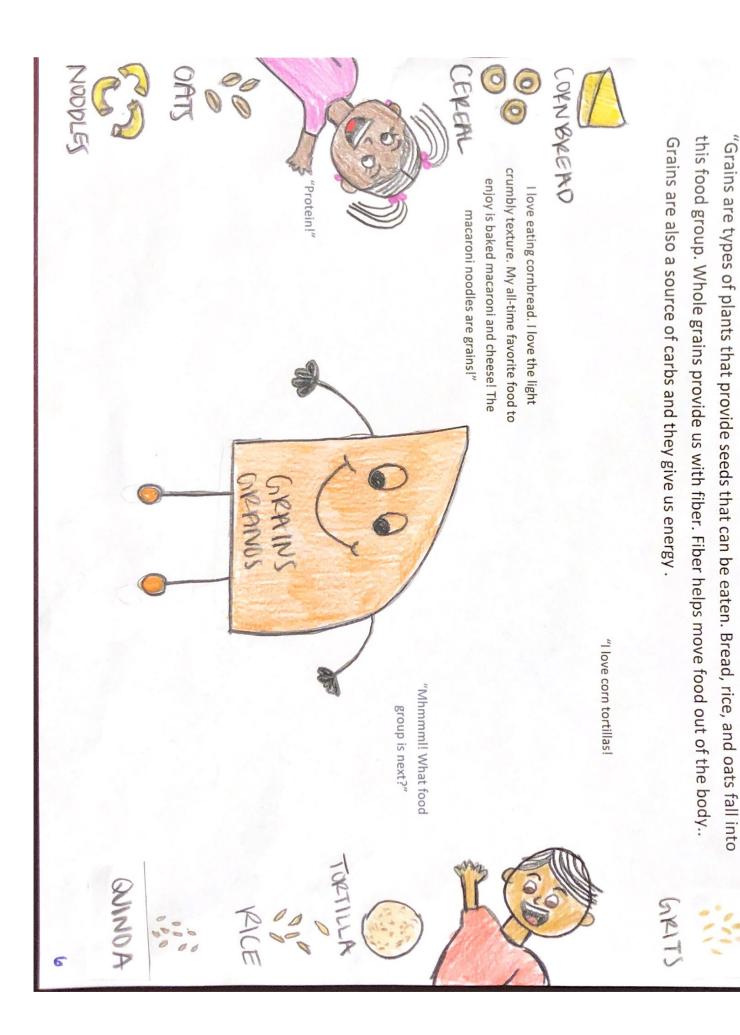
SPINACH "Well, I'll make sure to share some with you but for now let's move on to grains."

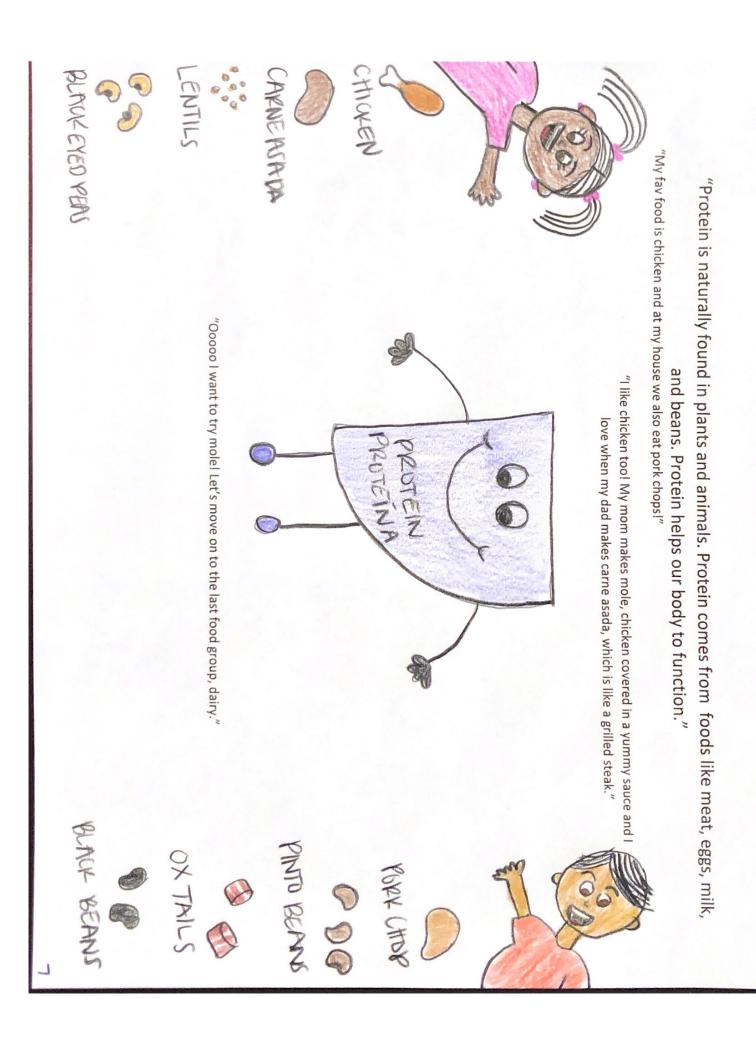
SWEET

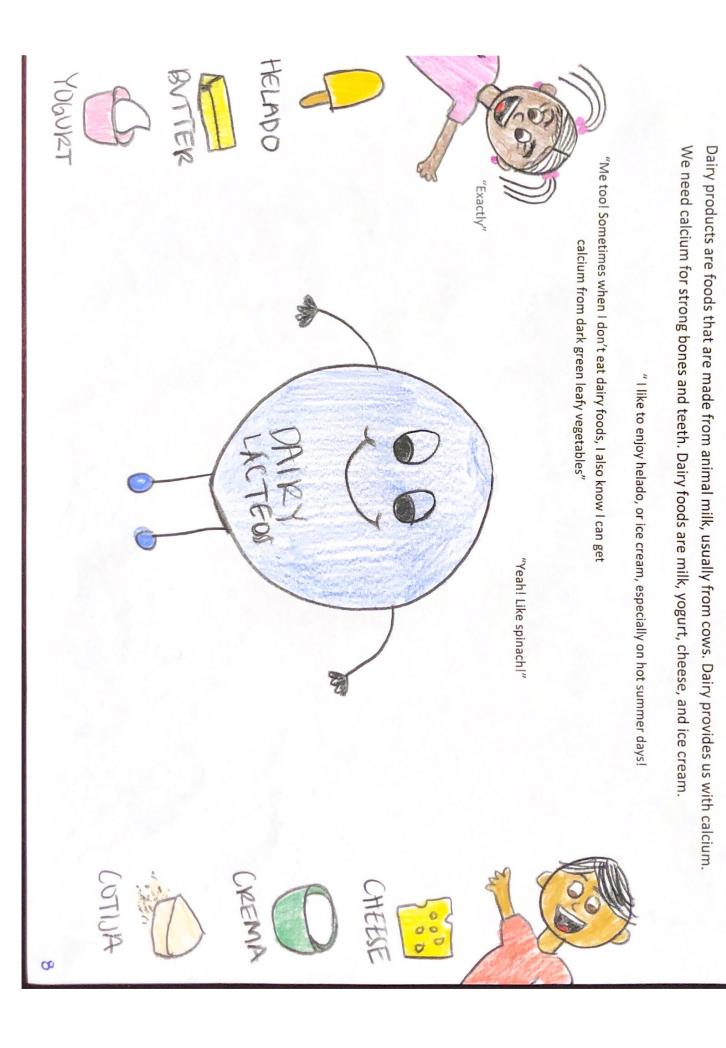
PUTRTO

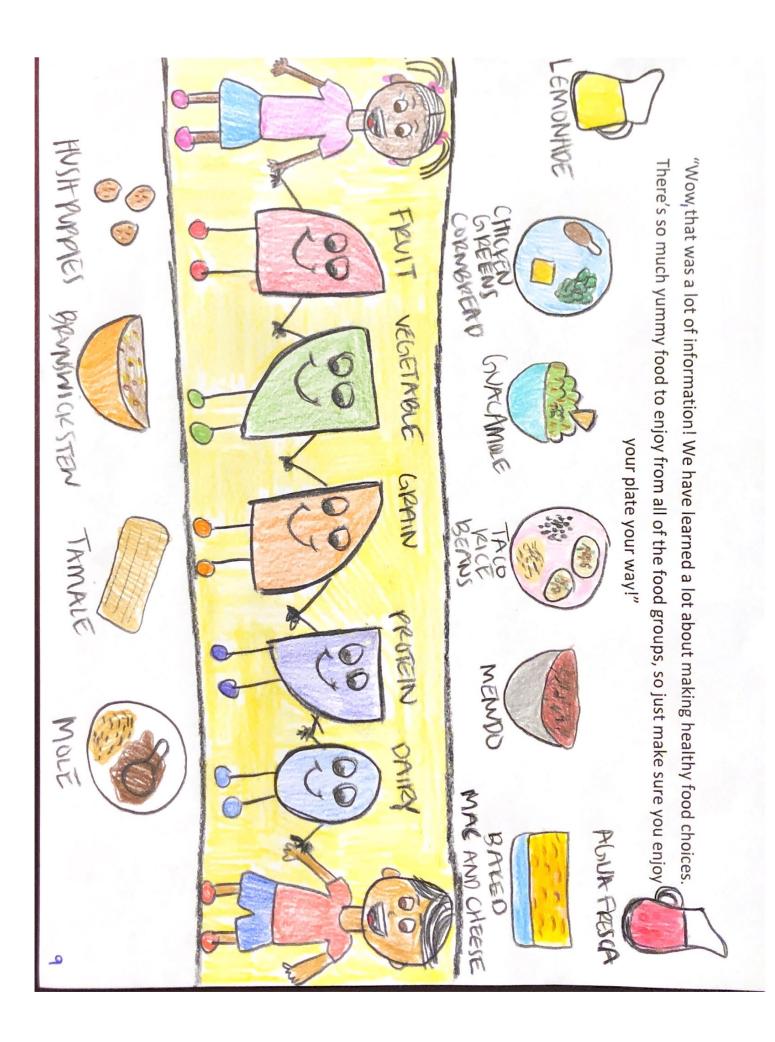
EGETABLES VEGETALES











Healthy Tips for the Guardians

Fruits

- At least half of the recommended amount of fruit should come from whole fruit, rather than 100% fruit juice.
- Whole fruit is preferred, however canned, frozen, or dried fruit can also provide your growing child with nutrients.

Vegetables

- Vegetables come in a variety of colors and each color may provide different vitamins and minerals
- It is important to vary the vegetables and make sure your plate is colorful

Grains

- Make half of the grains whole grains. Whole grains have more fiber, B vitamins, and iron compared to refined grains
- When shopping try to purchase whole grain bread, cereal, noodles, and tortillas.

Protein

- Select a wide variety of protein foods to get more of the nutrients your body needs and for health benefits.
- Try baking your meats or using an air fryer to help lower cholesterol and fat intake

Dairy

- Move to low-fat or fat-free dairy milk or yogurt (or lactose-free dairy or fortified soy versions)
- When buying milk alternatives look for good sources of protein and vitamins and minerals

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13. <u>https://www.amazon.com/s?k=healthy+eating+children+book&i=stripbooks&rh=n%3A4</u> %2Cp_n_feature_five_browse<u>bin%3A2579000011%7C2579001011&dc&qid=1644509089&rnid=2245026011&ref=sr</u> _nr_p_n_feature_five_browse-bin_4

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