EAT THIS NOT THAT

Inspiring healthy food advocates

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Cells are the building blocks that create life. Their ability to function properly can be affected by food, medicine, and the environment. The study of the stages that cells undergo is an essential science that helps determine causes of many diseases. Not only that, cell research allows us to understand the detection of diseases, diagnosis, prognosis, and treatment of diseases that affect the body. According to the physician, scientist and author Dr. Siddhartha Mukherjee, "Cancer is the Emperor of all Maladies."

Knowing and understanding how to build a diet with fruits, vegetables, healthful grains, and legumes from a young age will help children choose and even prefer foods beneficial to their health throughout their lives. It is no secret that in especially lower-income neighborhoods, healthy-food options are not easy to find. Not only are healthy, whole foods more expensive than mass produced foods, but their prices also tend to be even more expensive when sold in corner stores or bodegas. Adding to the challenge is the recent COVID-19 pandemic, which has led to a decrease in activity in many children and an increase in weight and stress levels. Parents who traditionally relied on public schools to provide their children a balanced breakfast and lunch have had to find creative ways to provide those meals themselves while also continuing to provide snacks and dinner on a limited budget. Inexpensive foods of convenience (high in sugar, salt, and fat) have been given preference over healthy meals. Fried foods, take-out meals, and junk food continue to be the source of sustenance for many of these families as a means of stretching their dollars. These factors will setup unhealthy eating habits and to the children's overall health as they grow into adulthood.

Rationale

In spite of increased funding for cancer research and the use of technology to improve wellness outcomes for patients diagnosed with cancer and other chronic diseases, African Americans still face challenges such as equitable access to healthcare and education about the prevention of disease. So it begs the question: how soon is too soon to teach children about the importance of nutrition and the role it plays in the prevention and reduction of chronic diseases? How can we simplify the research to make it more accessible to Teachers of grades Kindergarten to 2nd? What would a unit on the education of developing lifelong nutrition habits look like for African American children whose cultural identities are enriched by generational cuisine? A four-week unit of study will introduce good foods versus bad foods and how proper nutrition reduces the risks of chronic diseases. The chronic generational diseases that affect many families of our school's impoverished neighborhood such as, high cholesterol, diabetes, and high blood

pressure, are, in fact, reversible or preventable through changes in lifestyle inclusive of diet, medical screenings, and exercise. However, COVID related behaviors, access to famer's markets, inflated supermarkets and /or corner-store pricing, medical biases, and lack of education in urban communities continue to plague impoverished or neighborhoods with large populations of brown people.

Content Objectives

This K-2 unit study aims to reverse the trend and set the foundation for success in teaching children at an early age how to make healthy decisions, how to view food as fuel, and ultimately understand why their choices matter. This unit study aims to (1) teach children about healthy foods through various media, games and activities, (2) walk through the different food groups and discuss the definition of a healthy diet by means of visuals and flashcards, (3) provide children the tools to make healthy decisions independently, (4) practice making healthy decisions through hands-on games and activities and (5) enable children to be healthy, confident, role models for their peers, so that they may spread awareness through their school community and neighborhood and grow up to become healthy food advocates.

Teaching Strategies: Lumio by Smart Learning Suite https://suite.smarttech.com/share/2d64953a-9731-4dfe-96aa-f03f866e1719

Teacher will access prior knowledge using a Read Aloud entitled "The Very Hungry Caterpillar" and Smart Learning Suite. Teacher will engage students before, during and after reading using vocabulary words, fruit, vegetable, grain, protein, and dairy.

Teacher will engage students in a Food Recognition Bingo game from the Oriental Trading Company in order to review identifying and sorting food groups. Teacher will then ask students to recall the different foods that the Hungry Caterpillar ate and to classify them by healthy or unhealthy.

Teacher will now introduce today's text: "Choose Good food: My Eating Tips" on Epic Before reading, teacher will review the text structure for informational text. Teacher will introduce vocabulary words: energy, and nutrients. Teacher will point out the meaning of the words during reading and after reading Teacher will direct students turn and talk to a partner about foods that are healthy and foods that are not.

Teacher will then help students conduct an experiment using sugar: https://www.thoughtco.com/see-how-much-sugar-is-in-a-soda-607825?print
Students will hypothesize what a healthy amount of sugar intake is using beverages items. Students will learn how to measure, in grams that amount of sugar hidden in each

beverage. Students will then compare the USDA recommended allowance versus their amounts to make conclusions about healthier alternatives.

Teacher will review the benefits of eating healthy with the students. Teacher will then explain that today's lesson will focus on the cause and effects of eating junk food using a video: Healthy Food vs. Junk Food Song https://youtu.be/fE8lezHs19s. Students will then respond to the video by citing three ways our body responds to too much junk food.

Teacher will now introduce the concept of using food for fuel by demonstrating portion size and daily activity. Students will be given Myplate templates and colored play-dough. The students will represent each food group with a specific color: red = fruit, green = vegetables, orange = greens, purple = protein, and blue = dairy. Students will use a measuring cup to decide the amount of dough to place on the worksheet. Teacher will review the portion size chart with the students. Students will compare their estimates with the actual recommended amounts then practice recognizing portion amounts using their hands as visual aids. Teacher will review what the students learned about the benefits of eating healthy food. Teacher will then tell the students that today's video will show the causes and effects of eating unhealthy foods.

Teacher will review what the students learned about the benefits of eating healthy food by playing an online memory game with them. Then the Teacher will read aloud, "Zach Gets Some Exercise" by Sara Duchess of York. Teacher will then ask volunteers to name ways they exercise and make a list for the class. Teacher will then introduce the concept of walking to stay healthy by asking each child to count the number of steps they take to get from one point of the room, to the opposite side. Children will place a sticker, with their names on it on a pre-made anchor chart. After everyone is done the children will observe the data and make conclusions. The teacher will then introduce how to use a pedometer to track steps and how it helps us to stay active. Children will then are assigned a pedometer and ask to track their steps from dismissal from school to arrival. Data from that assignment will be collected and recorded.

Teacher will demonstrate how to create healthy snacks using a video from the Food Trust. Then student will create a healthy snack. Finally Teacher will enroll the classroom at the Free Library of Philadelphia's Culinary Institute for educational programs.

PA Common Core Standards: ELA

1.1 Foundational Skills

Fluency CC.1.1.2.E

Read with accuracy and fluency to support comprehension.

Phonics

CC.1.1.2.D

Know and apply grade-level phonics and word analysis skills in decoding words

1.5 Speaking and Listening

Students present appropriately in formal speaking situations, listen critically, and respond intelligently as individuals or in group discussions.

1.2: Reading Informational Text

Students read, understand, and respond to informational text – with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.

1.3: Reading Literature

Students read and respond to works of literature – with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.

Informative/Explanatory Writing- CC.1.4.2.A

Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

Opinion Writing- CC.1.4.2.G

Write opinion pieces on familiar topics or texts.

Narrative Writing- CC.1.4.2.M

Write narratives to develop real or imagined experiences or event.

MATH

K.CC.A Know number names and the count sequence.

K.CC.B Count to tell the number of objects

K.CC.C Compare numbers

K.MD.A Describe and compare measurable attributes

- **1.OA.A** Represent and solve problems involving addition and subtraction
- **1.OA.B** Understand and apply properties of operations and the relationship between addition and subtraction
- **1.MD.**C Represent and interpret data

Health, Safety and Physical Education

Standard - 10.1.2.C1

Identify foods and the roles they have in keeping our bodies healthy.

Standard - 10.1.2.D1

Distinguish between healthy and unhealthy behaviors.

Standard - 10.1.2.E1

Identify and discuss common health problems and risk factors.

Standard - 10.4.2.A1

Demonstrate coordination of purposeful body movements.

Standard - 10.1.12.B

Evaluate factors that impact the body systems and apply protective/ preventive strategies.

- fitness level
- environment (e.g., pollutants, available health care)
- health status (e.g., physical, mental, social)
- nutrition

Standard - 11.3.12.C

Evaluate sources of food and nutrition information.

Standard - 11.3.12.F

Evaluate the application of nutrition and meal planning principles in the selection, planning, preparation and serving of meals that meet the specific nutritional needs of individuals across their lifespan.

Science

Standard - CC.3.5.6-8.C

Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

Standard - CC.3.5.6-8.I

Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.

Classroom Activities

- 1. MyPlate Anchor Chart
- 2. Food Sorting Game
- 3. Science/Math: What food has the most sugar and should be avoided (Experiment)
- 4. Writing: Response to Reading: Cause and Effect Chart
- 5. Measurement/Math: How much is a portion using play-dough
- 6. Gym/Math: Students will learn how to use pedometers to track their steps in order to discuss how many steps they should take versus how many they actually take per day.
- 7. Prepare a healthy snack
- 8. Participate in classes at the Free Library of Philadelphia's Culinary Institute

Resources

- 1. "Choose Good food: My Eating Tips" on Epic
- 2. Crunch Celery Sticks https://youtu.be/KN1v7HJ5yEM
- 3. Food Recognition Bingo. Oriental Trading Company
- 4. Healthy Food vs. Junk Food Song https://youtu.be/fE8lezHs19s
- 5. Healthy Foods Worksheet
- 6. How many steps.pdf
- 7. Lumio by Smart Lesson Suite Lesson Plan: https://suite.smarttech.com/share/2d64953a-9731-4dfe-96aa-f03f866e1719

- 8. Myplate serving size: https://www.superhealthykids.com/wp-content/uploads/2016/05/MyPlate-Servings-Per-Day-for-Kids.pdf
- 9. Portion size chart: https://www.superhealthykids.com/parenting/myplate-guide-portion-sizes/
- 10. The Very Hungry Caterpillar. https://youtu.be/vkYmvxP0AJI
- 11. Zack Gets Some Exercise. Sara, Duchess of York. Sterling Children's Books. New York 2009

Additional Text/Resources

- 1. *Eat Healthy, Feel Great.* William Sears, Martha Sears and Christine Watts Kelly. Little Brown and Company. Boston New York London. 2002
- 2. Germs Make Me Sick Melvin Berger. Harper Collins. 1995
- 3. Going on a Journey: Songs for Everybody Jump With Jill CD 2010
- 4. Gobble Up Math: Fun Activities to Complete and Eat for kids in grades K − 3. Sue Mogard and Ginny McDonnell. The Learning Works, Inc. Huntington Beach CA 1994
- 5. Healthy Snacks on My Plate. Mari Schuch. Capstone Press. 2013
- 6. I Know How We Fight Germs. Kate Rowan. Scholastic, Inc. 1998
- 7. The Fruit Flies Picnic Kathleen Stefancin. Smart Pics, Incorporated 2010
- 8. Snack and Move Cards. The Food Trust. 2009
- 9. Supermarket Kathleen Krull. Holiday House. New York 2001
- 10. Things That Grow. Paradise Press Inc. 2001
- 11. Vitamins and Minerals Joan Kalbacken. The Children's Press. 1998
- 12. What Happens to Your Food? Alistair Smith. Usborne Publishing Inc. 1997
- 13. The Vegetables We Eat. Gail Gibbons. Holiday House. New York. 2007
- 14. Yoga Pretzels: 50 fun Yoga Activities for Kids and Grownups. Barefoot Books

Materials

- 1. Anchor Charts
- 2. Markers
- 3. Crayons
- 4. Graph Paper
- 5. Measuring cups
- 6. Pedometers
- 7. Pencils
- 8. Play-Dough
- 9. Pretend Play Food Set
- 10. Salt

- 11. Soda bottles, empty
- 12. Sugar
- 13. T Chart worksheet Teaspoons

Bibliography

"Academic Standards for Health, Safety and Physical Education." https://www.stateboard.education.pa.gov/Documents/Regulations%20and%20Statements/State%20Academic%20Standards/SandyHealth.pdf.

Cancer Biology and Technology: TIP Spring Seminar 2021. Sandra Ryeom, PhD and David Mankoff, MD, PhD

<u>Good My Eating Tips (EPIC)</u>Rexford, international Center for Leadership in Education, 2019.

Eat Right Philly: MYPlate: https://sites.google.com/philasd.org/eatrightphilly/3-5/myplate?authuser=0

Eat Right Philly: Nutrition Lessons

Eight-Week Nutrition Class. Vanita Rahman, MD Deitra Dennis, RN and Marc Rameriz. 2021 Physicians Committee for Responsible Medicine: https://www.pcrm.org/

"Experiment to See How Much Sugar Is in a Soda "Anne Marie Helmenstine, Ph.D. https://www.thoughtco.com/see-how-much-sugar-is-in-a-soda-607825?print

Free Library of Philadelphia Culinary Literacy
Center: https://libwww.freelibrary.org/programs/culinary/nourishingliteracy.cfm

The Reading Strategies Book: Your Everything Guide to Developing Skilled Readers. Jennifer Serravallo. Heinmann. Porthmouth, NH. 2015

Rigorous Curriculum Design: How To Create Curricular Units of Study That Align Standards, Instruction, And Assessment. Second Edition. Larry Ainsworth and Kyra Donovan. International Center for Leadership in Education. 2019

Temple Center for Substance Abuse Research

The Writing Strategies Book: Your Everything Guide to Developing Skilled Writers. Jennifer Serravallo. Heinmann. Porthmouth, NH. 2017

Your Literacy Standards Companion: What They Mean and How to Teach Them. Grades K-2. Sharon Taberski with Jim Burke. Corwin Literacy. 2017

Appendix

Nutrition Lesson

Prek-2 Nutrition Lesson

Elementary Unit on Nutrition