A page by page Teacher's Guide for

GOOD ENOUGH TO EAT: A KID'S GUIDE TO FOOD AND NUTRITION written and illustrated by Lizzy Rockwell, HarperCollins, 1999

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Guide written by Lizzy Rockwell

Front End Sheets: Plant foods

See how many foods students can name. What foods could be added to each category?

Study My Plate guidelines http://www.choosemyplate.gov/ and discuss where foods pictured fit on the plate. Read Jack and the Hungry Giant: Eat Right with MyPlate, by Loreen Leedy, Holiday House 2015

Take a field trip to a grocery store, green grocer, or farmer's market and identify various plant foods. Talk about their sources. How can we have vegetables year round in temperate climates? Discuss food distribution.

Observe which parts of a plant are edible. Help students notice the following plant parts:
roots: carrots, beets, radishes, potatoes.
stalks: celery, asparagus, rhubarb
bulbs: onions, garlic, leeks, scallion, shallots
pods or legumes: (examples also illustrated on back end sheets) beans, peas, peanuts, soy beans
seeds: (illustrated on back end sheets) sunflower seeds, pumpkin seeds, poppy seeds, sesame seeds
nuts: (back end sheets) walnuts, filberts, pecans, almonds
leaf: lettuce, spinach, swiss chard, kale, basil, cabbage
flower: broccoli, cauliflower
seed bearing fruits (these started as flowers): tomato, zucchini, pepper, pumpkin, cucumber, melon, apple, pear, orange, kiwi, berries, and grapes
grains (seeds from grasses ground into flour): wheat, rye, pumpernickel, oat, and semolina
grains eaten whole: oats, barley, rice, and corn

Title Page

Identify foods in letters.

Have students create illustration of his or her name or self portrait using foods for every shape.

Pages 2-3: Hunger

Right before lunchtime, have students do descriptive writing piece or make an illustration, describing his or her own hunger symptoms. Students could also describe how family members and pets behave when hungry.

Make analogies to other machines and their energy sources:
What happens when a radio is low on batteries?
...a car low on gas?

Pages 4-5: Family Meals

Discuss importance of sitting down with family to eat. Have children share what kinds of discussions are held at meal time. Write a descriptive essay about the favorite spot a family meal has been shared, ie: campsite, sail boat, kitchen table, back yard, city park, relative's home, etc.

Have children create illustrated menu of favorite family meal and compare with classmates.
Do children from different cultures have different rituals at mealtime? Do they use different utensils, ingredients or cooking tools?

Let children bring favorite family recipe or prepared dish to class for tasting party. Invite parents.

When book is finished come back to this illustration and count servings from the My Plate Graphic. How would children rate this meal for good nutrition? What nutrients can they identify being supplied by the foods pictured here?

Pages 6-7: Eating is Important

Look at illustrations and predict how food makes the actions depicted possible. After finishing the book, look at predictions and using what they now know, correct or reinforce predictions.

After reading book use this illustration to identify which nutrients enable which actions, and which food could supply that nutrient.

For example:

*Carbohydrates give you the energy to *move*. Cereal supplies carbohydrates

*B Vitamins help your brain function well so you can *think*.
Lettuce, grains and meat supplies B Vitamins.

* Water helps you *stay cool*. Juice or drinking water supply water.

* Calcium helps your bones *heal*. Milk and spinach supply calcium.

Have students create a diagram of their own examples of how nutrients make your body work. Diagram can be simple or complex.

Pages 8-9: Naming Nutrients

Use gram scales and a common unit such as flour, or rice to weigh the different amounts shown on scales in illustration for protein, carbohydrates, vitamins, and minerals. Use water to weigh water, and oil to weigh fat.

Discuss that water is in almost every food eaten. To illustrate this, use water to reconstitute dried apples, powdered milk, and Tang.

Weigh a piece of bread fresh from the package. Allow bread to dry out for a few days and then weigh again. Difference in weight is the amount of water that has evaporated.

Look at food labels on packaged foods (these can be collected as empty boxes or wrappers from parents who would throw them out otherwise) to see how many grams of each nutrient that food supplies. Nutritional values of vitamins and minerals will be listed as percentages of U. S. Recommended Daily Allowances.

Have students compare nutritional values of some of these foods:

milk

hot dogs
cereal
canned soup
bread
cookies
canned beans
frozen dinner

Which foods are good sources for which nutrient?

Discuss foods that are not healthy because they contain too much salt, sugar, fat or chemicals. Read food labels to identify ingredients to avoid or eat in moderation.

Pages 10-11: Digestion and Fiber

Use electric blender to puree fruits into a mash to illustrate break down of food during digestion. Set aside some coarsely cut up fruit.

Have students use a sponge to see how the mashed, liquefied fruit can be sopped up, or absorbed, while the cut up fruit cannot be absorbed.

For a detailed explanation of digestion read, What Happens to a Hamburger, by Paul Showers.

Identify foods with fiber. Look on food labels for fiber content. How many servings of different foods would be needed to achieve the recommended 25 grams of daily fiber?

Using food guide labels, compare fiber content of different foods:

White bread vs. whole wheat bread
gummy bears vs. raisins
corn flakes vs. shredded wheat
White rice vs. brown rice

Pages 12-13: Carbohydrates

Have students imagine they are preparing a menu for a night-before- the-marathon

feast. Which kind of carbohydrates would they include on their menu for the longest lasting energy?

Talk about what runners could use for energy boosts during the long race.

Do taste tests in class to identify starches and sweets in different foods.

Look at cereal box food labels and compare grams of sugar among different brands.

Identify other foods with overly sweet carbohydrates.

Introduce term *complex carbohydrates* for starchy foods, and *simple carbohydrates* for sweet foods.

Pages 14-15: Protein

Help students to observe their growth and strength.

How many push ups can they do?

Have them bring in baby pictures or old out grown clothes or shoes to observe their growth over the years. Emphasize concept that their bodies could not grow without the protein supplied by food.

Notice animals depicted on spread: cow, pig, chicken, and discuss which familiar foods come from those animals, such as hamburgers, hot dogs, bacon, scrambled eggs, cheese, chicken nuggets....

Introduce term *vegetarian*. Is anyone in the class a vegetarian, or have a family member who is a vegetarian? Look at back end sheet to see wide variety of protein rich plant foods.

Make a humus dip from chick peas, tahini, olive oil and lemon juice. Serve with pita bread for a high protein vegetarian snack.

Sprout and grow a kidney bean by placing between two wet paper towels. Keep towels damp till sprout appears. Transplant to dirt filled cup to grow bean plant. Plant in ground or large pot when 3" high.

Pages 16-17: Fat

Before conducting experiment illustrated in book, have students make predictions about which of the foods they have collected will contain fat. After experiment, compare predictions to results.

Use food package labels to find fat content of different foods. Compare fat grams between different but similar foods:

bagel vs. donut
bologna vs. turkey breast
whole milk vs. skim milk
pretzels vs. potato chips
Sherbet vs. ice cream

Introduce terms: *saturated fats* and *unsaturated fats*. Saturated fats are a factor in heart disease. Unsaturated fats are not. Identify saturated fats as those which are solid at room temperature, such as, meat fat, butter, hydrogenated oil (like Crisco), and palm oil.
Unsaturated fats like olive oil, and safflower oil are liquid at room temperature.

Pages 18-19: Water

Discuss idea that water is needed by all living things. Note that the only planet in our Solar System suspected of life, besides Earth, is Mars. This is because scientists have found evidence of water once existing on Mars.

Have children compare their anatomy to other animals. Help them notice that humans don't have scales, like a lizard, or fur like a bear, or a hump, like a camel, to help them preserve their body's water.

To observe the way water escapes from their body, have students breathe on a mirror and notice mist that forms. Have students jump in place or run on the field or gym till they break a sweat. Blot sweat from forehead on a paper towel for observation.

Try squeezing different fruits with a fruit juice press, to measure how much liquid different foods contain. See if children can observe what valuable part of the fruit is left behind, when making fruit juice. (answer: fiber)

To illustrate the importance of drinking plain water over sweetened beverages, have students fill a cup with twelve ounces of water. Measure 12 teaspoons of sugar into cup and stir. Explain to students that this is the amount of sugar contained in a can of

soda or fruit drink. Look at food labels on beverages to compare sugar grams. Have children deduce best way to quench thirst.

Ask children to predict sugar content of beverages based on labelling, padkage design, and advertising campaigns. They will likely predicts that juices (like Snapple) and sports drinks (like powerade) are lower in sugar and more healthy than soda. Then read nutritional labels. They will discover that these products are loaded with sugar, but disguised as healthy foods.

Pages 20-21: Vitamins

Discuss that vitamins are needed in tiny amounts, but must be consumed by eating a variety of foods.

Notice the range of colors found in a varied diet. Cut out photographs of colorful foods from magazines and food labels, and make a a giant food rainbow collage for a bulletin board display.

Have children study illustration and then explain how each costume symbolizes the function of that vitamin. Have them draw an illustration of another costume which would also be appropriate. (Do this also with mineral illustrations on pgs. 22-23)

Have students do a research project and oral presentation on one vitamin. Students can elaborate on the vitamin's function, its deficiency symptoms, history of its discovery, and foods which are good sources. Project could include illustrated poster, the use of a costume, and a recipe or prepared snack or dish which is rich in that vitamin.

Introduce term *organic*, which means found only in living things.

Pages 22-23: Minerals

Discuss that minerals are *inorganic*, coming from non-living elements such as rock and metal, but essential nutrients for living things. No plants or animals could survive without minerals. Plants absorb minerals from the soil through their roots as they grow.

Have students tap their teeth and notice how similar the texture is to small smooth pebbles. Their teeth are made mostly of calcium.

Grind Cheerios, or some other iron fortified cereal, down to a fine powder. (Use either a food processor, mortar and pestle, or rolling pin over plastic bag filled with cereal.) Have students hold a strong magnet over the powder and observe how tiny particles of iron separate from powder and adhere to magnet.

Look at Kosher or coarse sea salt crystals under strong magnifying glass, and compare their structure to other non-edible crystals.

Look at food guide labels for salt content. Make chart of salt content for various foods.

Do further investigation about the many other minerals and their functions. ie, magnesium, zinc, copper, and selenium.

Pages 24-25: Plant Foods

Come up with a list of reasons to eat plant foods:

- Taste delicious
- Best way to get colorful diet without artificial ingredients
- Good sources of vitamins and minerals
- Fiber
- Protein

Read Plants Feed Me by Lizzy Rockwell (Holiday House 2014) to find out what plant foods look like while still attached to the earth.

Grow a windowsill herb garden. Fill a long 12" deep windowsill pot, with potting soil. Plant 1/3 with cilantro seeds, 1/3 with parley seeds, and 1/3 with Basil seeds and mark with labels. Plant seeds. Keep well watered and warm and in a very sunny spot till germination and afterwards.

Notice and record variations in growth. Which seeds germinate fastest? What do the leaves smell like and taste like? What are some recipes you could find or invent that use these three herbs?

Make a green salad, using as many colors and variety as possible.

Make a fruit salad.

Learn about sweet fruits and where they grow. Which grow on trees? Bushes? Vines? What climate do those plants need to grow?

Pages 26-27: Cooking

Talk about cooking as a profession or a hobby.

Create recipes or parts of recipes from pgs. 30-31 which can be completed in school. If a kitchen is not available, ask for parent volunteers to complete recipes. Have a feast in the classroom.

Or use other child oriented cook books for healthy recipes which can be prepared totally in the classroom.

Create an imaginary restaurant menu using the Food Guide Pyramid.

Plan and prepare a parent or school wide breakfast in honor of National Nutrition Month in March.

Have students rate their cafeteria lunch for nutritional worth. If they find the menu lacking in value, compose a letter to the superintendent or Mayor, asking for improved nutrition in the cafeteria.

Pages 28-29: Feasting

Talk again about the ritual of eating. Have children think of occasions when people use food to celebrate.

Read A Medieval Feast, by Aliki

Have students do research project on food rituals and celebrations around the world. Some topics are: Thanksgiving, Kwanza, Mardi Gras, Passover, Chinese New Year, Octoberfest, etc... How are foods symbolic in these celebrations? What is the origin of the feast? What dishes are served?

Have students make fancy place mats on the theme of healthy eating to be laminated and used during classroom feast. Or students could make set of place mats for family.

Go on a field trip to a restaurant and focus on polite table manners and the ritual of eating.

Pages 30-31: Recipes

Make recipes in class or have students copy down most tempting recipe to try at home.

Cover up nutritional information below recipes and see if students can guess what nutrients are supplied by that dish based on its ingredients. Reveal nutritional information and compare to predictions.

Page 32: Calories

Have children study sizes of 200 calorie portions of different foods. Help them to notice that the small portions are for foods with a high concentration of fat or sugar or both, such as butter and fudge. Celery, the largest food portion pictured is made mostly of water and fiber.

Use food guide labels, and reference books, such as Jane Brody's Nutrition Book, or the calorie table inside The Joy of Cooking, or online resources such as http://www.calorieking.com/foods/ to research calorie content of various foods. Make a calorie table for the classroom.

Look at illustration of the boy sitting on the stool, perfectly still. See if students can describe ways the boy is using energy without appearing to move. Have students sit perfectly still and then describe the energy, (breathing, heart beating, thinking) which they can notice happening inside their bodies.

To illustrate changes in energy use, have children take their pulse for 30 seconds at rest. Record the pulse on paper. Then let them walk around the room or outdoors for five minutes. Measure and record pulse again. Let students run or jump in place as fast as they can for another five minutes, and measure and record pulse a third time. Compare and chart results. Observe and discuss other body changes, such as breathing rate, body temperature, perspiration, etc., which occur with increased activity.

Have children create posters showing fun and active ways to pass the time besides watching television or playing video games. Decorate school halls with posters to promote a school wide "Get up and Go!" campaign.

Read THE BUSY BODY BOOK: A KID'S GUIDE TO FITNESS by Lizzy Rockwell.

Back End Sheets

Have students note how many different foods are included in the Meat/ fish/ poultry/ eggs/ dried beans/ and nuts. What foods can students think of which are not illustrated in these end sheets? Look at My Plate Guidelines and identify food groups, and favorite foods that fit in those groups. http://www.choosemyplate.gov/

Using front and back end sheets for ideas, have the class create a bulletin board collage of a long buffet table filled with healthy food choices. Students can illustrate imaginary characters serving themselves at the table or create self portraits. Real paper plates, cups and doilies can be used, for a dramatic effect. Encourage colorful and three dimensional collages of food.