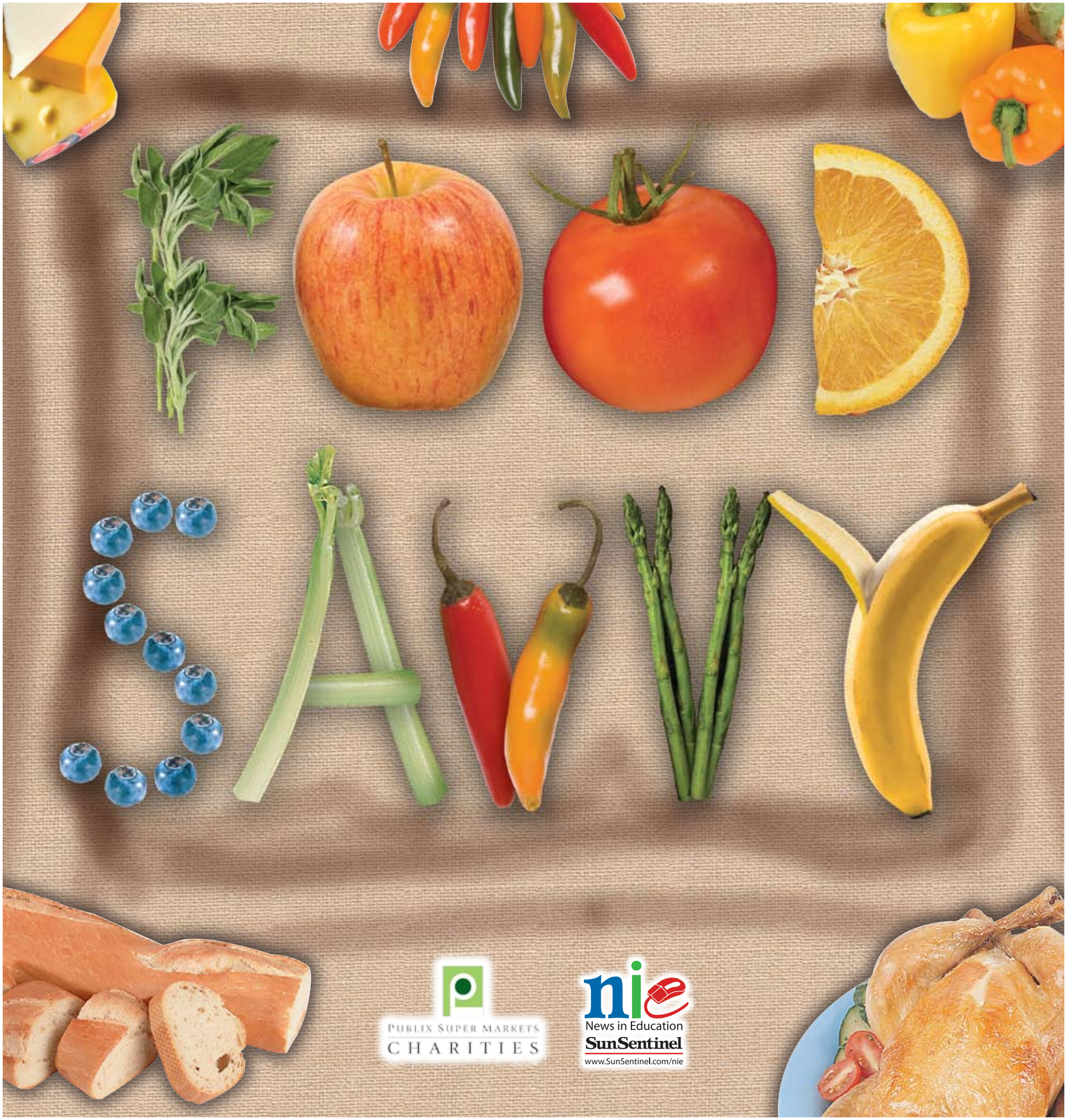

PUBLIX SUPER MARKETS
CHARITIES

nie
News in Education
SunSentinel
www.SunSentinel.com/nie

FOOD SAVVY – INTRODUCTION

Human beings have to eat to live. For the sake of our health, humans have to eat well. They also must have a grasp of how to buy food, handle and store it safely, and cook it properly. We have to know what to eat, how to make healthy food choices, and where to go for information. It's called 'savvy' - having an understanding and common sense about a subject. This FOOD SAVVY curriculum guide is a good start to learning about the pitfalls of poor diet and lack of exercise with information and research on how to make the best choices for a lifetime of good health.

Think about how we relate to food. Every kind of food is at our fingertips. We have huge supermarkets, convenience stores, and fast food restaurants on every corner. Our social occasions almost always included sharing food, however, if you are living to eat instead of eating to live, you may be putting way too much emphasis on food.

We would like to recognize and thank **Publix Super Markets Charities Inc.** for supporting this curriculum. Also, thank you to the school districts of Palm Beach, Broward and Miami-Dade counties for providing much of the information in this booklet. Each has become proactive in helping local students become better food and nutrition consumers. Their contributions have been invaluable. Content also provided by Palm Beach Schools, Miami-Dade Schools and Healthy Celebrations, Conn. State Dept. of Education

TABLE OF CONTENTS

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About the Sun Sentinel News In Education program:

Throughout the school year, the Sun Sentinel NIE program provides newspapers, both digital and print, to South Florida schools at no charge. Our goal has been to help teachers help their students, promote literacy, encourage hands-on learning using the newspaper, and help students stay up-to-date on the world around them. Another key focus of our program is providing curriculum materials, like *FOOD SAVVY*, to enhance lessons in the classroom across all subject areas. These complimentary booklets are aligned with the Sunshine State Standards.

For more information about Sun Sentinel News in Education and to download educational materials, visit our website at: www.SunSentinel.com/nie

WISE CHOICES BEGIN AT HOME

Today's food markets are overflowing with choices (there's a reason they are called "super" markets). Every imaginable food item, fresh, boxed, refrigerated, frozen, sealed, canned or wrapped, is available. What foods are best? How do you choose? How do you know what's safe to eat? What do you do with it after you buy it?

ACTIVITY: MAKING SAFE CHOICES

1. To keep your family safe you need to know what to look for when buying different food items. Divide your class into 3 groups. Using a variety of resources, research and report on the best way to choose the followings items when you are shopping. Write down what to check for when buying each of the following:

a. Canned, boxed, and other "non-perishable" foods, such as canned fruits and soups, boxed mixes, pastas and rice.
b. Refrigerated and frozen foods. Include items like dairy products, juices, frozen dinners, etc.
c. Fresh foods like meats & deli items, fruits & vegetables, breads, pastries.

ACTIVITY: IS ORGANIC BETTER?

Many super markets have entire sections devoted to foods grown organically. Hold a class debate about the positives and negatives of growing and eating organic foods. Support your discussion with research and details from a variety of resources, including what "organic" means as applied to different foods, how a food is designated organic, who decides what and isn't organic, and how cultivating organic foods differs from regular cultivation methods.

ACTIVITY: TAKE INVENTORY AT HOME

Before shopping at your local Publix Super Market, you need to take inventory at home. Make time to do the following before leaving the house:

1. With a family member or friend, jot down a list of items you already have on hand. Which ones will last a while? Which ones need to be eaten right away? Which ones should be tossed out? It's always smart to check before you shop, so you won't duplicate items you already have.
2. Ask each member of your household to write down their favorite things to eat, for breakfast, lunch, dinner, and snacks. This way you have a starting point to decide on what foods to buy and what to leave off.
3. Keep these lists in a handy shopping folder or 3-ring binder.
4. With help from a grownup, make a shopping list of items you are going to buy.
5. Check the *Sun Sentinel* food ads and the Publix inserts for sale items.
6. Organize your list by how they are arranged in the store.

Sunshine State Standards Language Arts: SL.5.1, SL.5.4, SL.5.6, W.5.2, W.5.7, W.5.8, R.I.5.9, SL.5.1

PARTS OF A NUTRITION LABEL

Nutrition Facts

Serving Size 1 1/4 cup (50g)
Servings Per Container about 9

Amount Per Serving	Cereal	Cereal with 1/2 cup Skim Milk
Calories	170	220
Calories from Fat	10	10
		% Daily Value**
Total Fat 1g*	2%	2%
Saturated Fat 0g	0%	2%
Trans Fat 0g		
Polyunsaturated Fat 0.5g		
Monounsaturated Fat 0g		
Cholesterol 0mg	0%	1%
Sodium 0mg	0%	3%
Potassium 170mg	5%	11%
Total Carbohydrate 40g	14%	16%
Dietary Fiber 6g	24%	24%
Soluble Fiber less than 1g		
Insoluble Fiber 5g		
Sugars 0g		
Other Carbohydrate 33g		
Protein 6g		
Vitamin A	0%	4%
Vitamin C	0%	2%
Calcium	2%	15%
Iron	8%	8%
Vitamin D	0%	15%
Thiamin	10%	10%
Riboflavin	0%	10%
Niacin	15%	15%
Vitamin B6	0%	0%
Folate	0%	0%
Vitamin B12	0%	0%
Phosphorus	20%	30%
Magnesium	15%	20%
Zinc	8%	10%
Copper	8%	8%

* Amount in cereal. One-half cup skim milk contributes an additional 40 calories, less than 5mg cholesterol, 65mg sodium, 6g total carbohydrate (6g sugars) and 4g protein.

** Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

INGREDIENTS: 100% WHOLE GRAIN WHEAT. BHT ADDED TO PACKAGING MATERIAL TO HELP PRESERVE FRESHNESS.

CONTAINS WHEAT

DISTRIBUTED BY
PUBLIX SUPER MARKETS, INC., LAKELAND, FL 33802
PUBLIX GUARANTEE:
COMPLETE SATISFACTION OR YOUR MONEY BACK

Take time at home to study and learn what the labels on food packaging tell you. There is key information contained on the labels, which you should understand before you shop.

A. Serving Size – Serving size is based on the amount to be eaten at one time.

B. Servings Per Container – Tells the number of servings in the package, based on the serving size.

C. Calories – Calories measure the amount of energy supplied by this food.

D. Calories From Fat – This tells how many of the product's calories come from the fat it contains. No more than 1/3 of the calories that you eat in a day should come from fat.

E. Total Fat – Measures (in grams) the fat in each serving. You may also see "Saturated" and/or "Trans" fats or sometimes "Polyunsaturated" fats listed under total fat.

F. Calorie Conversion Information – This tells the number of calories per gram provided by carbohydrate, fat and protein. Fat contains 9 calories per gram. Compare that to 4 calories per gram in carbohydrates or protein.

G. Percent Daily Value – This chart shows how the nutrition provided by this food fits into an imaginary "perfect" 2000 calorie diet that provides 100% of all needed nutrients. Your goal should be to get 100% of each nutrient by eating a variety of foods each day.

H. Ingredients – This part of the label lists the ingredients contained in the food. They are listed from most to least. On the label for the cinnamon toasted cereal (see page 6) the first 3 ingredients listed are whole grain wheat, sugar and rice flour. Therefore, the main ingredient is whole grain wheat, second most is sugar, and third is rice flour. You want to read ingredients closely.

ACTIVITY: MEASURE IT

1. Pour yourself a bowl of cereal, typical of what you would normally eat.
2. Next, use a measuring cup to measure how much cereal is in your bowl.
   Write down the amount: _____.
3. Look at the label on your box. What is the recommended serving size? _____.
4. Look at the shredded wheat label on this page. What is a serving size? _____.
5. How does that compare with what you poured into your bowl?

It is important to pay attention to serving size. People in the food business will tell you that foods have been "supersized" over the years. Look at coffee shop muffins. They are double or triple the size they were years ago. We now have huge hamburgers, quart-sized drinks, and restaurant portions so big we have "doggie bags" for the extra food. Be aware of serving sizes – eating too much of even a healthy food isn't smart.

Sunshine State Standards: Language Arts: RF.5.4 Math: 5.MD.1

ACTIVITY: READING THE LABELS

1. How many total calories would you consume if you ate the whole box of shredded wheat cereal ? _____
2. What percentage of total fat in a single serving of the cinnamon-toasted cereal is saturated fat? _____
3. How much fiber is contained in a serving of shredded wheat? _____
   In the cinnamon-toasted cereal? _____
4. How much sodium (salt) is in each serving of the cereals? _____
5. If the total calories in a serving of cinnamon-toasted cereal is 130, and the calories from fat in that serving is 30, what percent of a serving of the cinnamon-toasted cereal comes from fat? _____
6. Which of the two cereals contains the most sugar? _____ fiber? _____ protein? _____

Fat contains 9 calories per gram. Carbohydrates and proteins contain 4 calories per gram.

7. If there is 1 gram of fat in one serving of the shredded wheat cereal, how many total calories from fat are you eating? _____
8. How many calories come from protein in one serving of the cinnamon-toasted cereal? _____
   From carbohydrates? _____
9. What nutrients contained in these cereals are new to you? Write them down on a piece of paper and find out what they are and why they are important to good health.

Nutrition Facts
Serving Size ¾ cup (31g)
Servings Per Container About 15

Amount Per Serving	Cinnamon Toast Crunch	with ½ cup skim milk
Calories	130	170
Calories from Fat	30	30
		% Daily Value**
Total Fat 3g*	5%	5%
Saturated Fat 0.5g	2%	2%
Trans Fat 0g		
Polyunsaturated Fat 0.5g		
Monounsaturated Fat 2g		
Cholesterol 0mg	0%	1%
Sodium 220mg	9%	12%
Potassium 45mg	1%	7%
Total Carbohydrate 25g	8%	10%
Dietary Fiber 1g	4%	4%
Sugars 10g		
Other Carbohydrate 14g		
Protein 1g		
Vitamin A	10%	15%
Vitamin C	10%	10%
Calcium	10%	25%
Iron	25%	25%
Vitamin D	10%	25%
Thiamin	25%	30%
Riboflavin	25%	35%
Niacin	25%	25%
Vitamin B_6	25%	25%
Folic Acid	25%	25%
Vitamin B_{12}	25%	35%
Phosphorus	4%	15%
Magnesium	2%	6%
Zinc	25%	30%
Copper	2%	2%

* Amount in cereal. A serving of cereal plus skim milk provides 3g total fat, less than 5mg cholesterol, 280mg sodium, 250mg potassium, 30g total carbohydrate (16g sugars) and 5g protein.

** Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

INGREDIENTS: WHOLE GRAIN WHEAT, SUGAR, RICE FLOUR, CANOLA AND/OR RICE BRAN OIL, FRUCTOSE, MALTODEXTRIN, DEXTROSE, SALT, CINNAMON, SOY LECITHIN, TRISODIUM PHOSPHATE, COLOR ADDED. BHT ADDED TO PRESERVE FRESHNESS.
VITAMINS AND MINERALS: CALCIUM CARBONATE, ZINC AND IRON (MINERAL NUTRIENTS), VITAMIN C (SODIUM ASCORBATE), A B VITAMIN (NIACINAMIDE), VITAMIN B_6 (PYRIDOXINE HYDROCHLORIDE), VITAMIN B_2 (RIBOFLAVIN), VITAMIN B_1 (THIAMIN MONONITRATE), VITAMIN A (PALMITATE), A B VITAMIN (FOLIC ACID), VITAMIN B_{12}, VITAMIN D_3.
CONTAINS WHEAT AND SOY INGREDIENTS.

DISTRIBUTED BY **GENERAL MILLS CEREALS, LLC.**
MINNEAPOLIS, MN 55440 USA

Exchange: 1 Starch, 1 Other Carbohydrate, ½ Fat
Exchange calculations based on *Choose Your Foods: Exchange Lists for Diabetes* ©2008 the American Dietetic Association, the American Diabetes Association.
This package is sold by weight, not by volume. You can be assured of proper weight even though some settling of contents normally occurs during shipment and handling.
F 3088179544 SSG 3089131544

ACTIVITY: COMPARE THE LABELS

Compare the label on the shredded wheat box (pg. 4)with this label for the toasted cereal (pg. 5). Create a bar graph comparing the two cereals. Include:

Serving size
Servings per container
Calories per serving
Calories from fat
Total fat
Sodium
Total carbohydrates
Protein
Any vitamins and minerals listed
First three ingredients in each cereal

By looking at your graph, can you make a decision about which cereal is healthier? Explain your answer using details from your graph.

HOW TO DECIDE IF A FOOD ITEM IS NUTRITIOUS

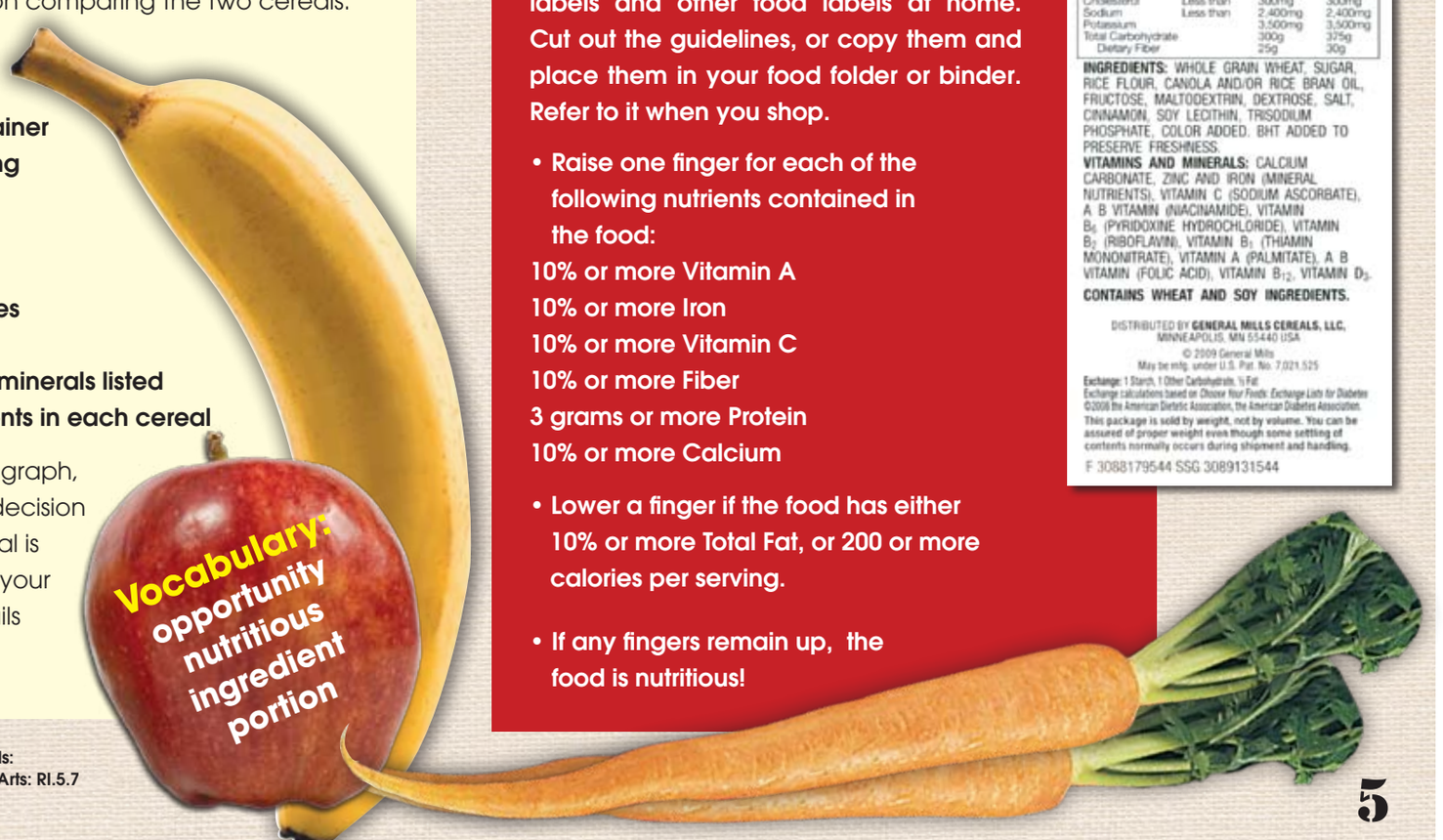
If you aren't sure whether a food is healthy or not, here is a simple way to help you decide. Try it out, using the two cereal labels and other food labels at home. Cut out the guidelines, or copy them and place them in your food folder or binder. Refer to it when you shop.

- **Raise one finger for each of the following nutrients contained in the food:**

10% or more Vitamin A
10% or more Iron
10% or more Vitamin C
10% or more Fiber
3 grams or more Protein
10% or more Calcium

- **Lower a finger if the food has either 10% or more Total Fat, or 200 or more calories per serving.**

- **If any fingers remain up, the food is nutritious!**



Sunshine State Standards:
Math: 5.G.2 Language Arts: RI.5.7

ACTIVITY: CHECK THE FINE PRINT

When you read a food label you are looking for all the details telling you whether or not the food is more or less nutritious. The package may look great, but the label tells the true story of what is inside.

In the same way, when you read an advertisement about a "special sale" or "one-time opportunity" to buy a product, you must read the details. It may sound like a great choice, but are there any hidden costs, special fees or taxes on the "deal"?

Look through the retail ads in the *Sun Sentinel* or the *Sun Sentinel Digital Edition*. Find one advertising a special sale or deal on a product. Make sure you read all the fine print. Are there any details in the fine print not listed in the main part of the ad?

TIME TO GO SHOPPING

You have your shopping list, you know what to look for when buying different foods, so it's time to make your purchases. With a grownup or older brother or sister, head to your local Publix Super Market to make your purchases. Remember to check each item for safe packaging as you learned in class and to read the food labels.

ACTIVITY: STORING YOUR FOOD

Answer the questions below by researching the best methods for storing each of the foods listed. Look at the packaging for directions or ask an adult. Should it be frozen? Stored in the refrigerator? Is it safe in the original package? After it is opened where does the product get stored? Explain why do you think certain details are put in fine print?

1. **Ground beef:** *example* *In the fridge in the original wrapping*
2. **Eggs:** _____
3. **Yogurt:** _____
4. **Lettuce:** _____
5. **Chocolate bar:** _____
6. **Mustard:** _____
7. **Bananas:** _____
8. **Fresh Fish:** _____
9. **Ice Cream:** _____
10. **Apples:** _____

Sunshine State Standards: Language Arts: RI.5.7, W.5.7, W.5.8

FOOD STORAGE CHART

PRODUCT	In Refrigerator 40° Fahrenheit (5° Celsius)	In Freezer 0° Fahrenheit (-18° Celsius)
Fresh Meat:		
Ground beef	1-2 days	3-4 months
Steaks and roasts	3-5 days	6-12 months
Pork chops	3-5 days	4-6 months
Cured Meats:		
Lunch meat	3-5 days	1-2 months
Hot dogs	2 weeks	1-2 months
Fish:		
Cod, flounder, haddock	1-2 days	Up to 6 months
Blue, perch, salmon	1-2 days	2-3 months
Chicken:		
Whole	1-2 days	12 months
Parts	1-2 days	9 months
Dairy Products:		
Brick or processed cheese	3-4 weeks	(not recommended)
Milk	5 days	1 month
Ice cream, ice milk	-	2-4 months
Eggs & Egg Products:		
Fresh in shell	3 weeks	-
Hard-boiled	1 week	-
Mayonnaise	2 months	-

ACTIVITY: WHAT'S THE DIFFERENCE?

1. Bacteria, viruses and parasites are different biologically. Define each and write a few sentences explaining what they are.

2. Choose any two examples from the possible diseases listed on this page, and create a Venn Diagram to compare and contrast them. Include in what foods they might be found and what their symptoms are once you are infected.

ACTIVITY: PLAN AHEAD

Pretend that you can only go Publix Super Market every three months. Using the *Sun Sentinel* FOOD section and other ads, cut out several foods you could buy that would last for three months if stored properly. Which foods did you choose and why? Which foods would you definitely not buy? Explain your reasoning.

Sunshine State Standards: Language Arts: RI.5.7, W.5.7, W.5.8, W.5.1

ACTIVITY: MAKE YOUR OWN CHART

Create a food storage chart like the one you see on this page. Place it in your food folder or binder for reference. Each time you purchase a new food, determine how it should be stored and for how long, and add it to your chart. Also, make notes about how long you can keep canned goods or other non-perishables like rice or flour on the shelf.

CREEPY CRITTERS AND FOOD-BORNE DISEASES

There are over 76 million cases of food-related illnesses in the United States each year. Most are caused by 3 types of microscopic critters lurking in & around your food. They are bacteria, parasites, and viruses. They may have weird-sounding names, but it is important to know what each is and their symptoms.

Parasites:

Cyclospora cayetanensis
Cryptosporidium parvum
Giardia labia

Viruses:

Hepatitis A; Norwalk

Bacteria:

Staphylococcus aureus
Salmonella • E. coli
Shigella • Listeria

If you experience any of the following symptoms, especially after eating, or eating with other people and everyone starts to feel sick, you may have a food-borne illness.

Symptoms vary but can include: diarrhea, abdominal cramps, sudden onset of nausea or vomiting, weakness, exhaustion, fever, muscle aches, headache, loss of appetite, bloating, gas. People with hepatitis A virus may not have any signs or symptoms of the disease.

PREPARATION IS EVERYTHING

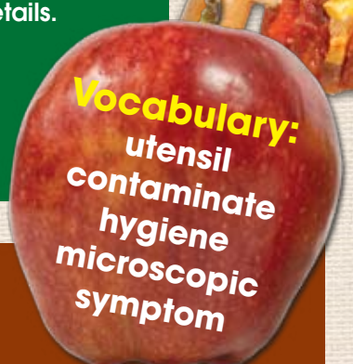
Now that you have well-stocked shelves and the fridge is full, you need to prepare your food. This means handling it correctly and cooking it properly. You are going to have to do some more research before you begin. However, there are a few rules that never change:

1. **Always wash your hands with warm water and soap for at least 20 seconds before touching any food. 20 seconds generally equates to singing "Happy Birthday" to yourself twice while washing.**
2. **Wash your work surfaces and utensils: countertops, cutting boards, any area that is in contact with your foods.**
3. **Follow any package directions carefully!**
4. **Don't cross-contaminate. Clean your work surface or cutting board and utensils before and after each food is prepared.**
5. **Cook to proper temperature.**
6. **Refrigerate promptly. This keeps those creepy critters from causing trouble.**

ACTIVITY: PROPER PREPARATION

Divide the class into 3 groups. Using a variety of resources research how to safely handle and cook the foods listed below. Design a poster, collage, make a video or give a speech demonstrating what you found. Give specific directions and details.

a. Group 1: raw beef, pork or fish.
b. Group 2: eggs and poultry.
c. Group 3: fruits and vegetables.



ACTIVITY: FOOD SAFETY INSPECTOR

By now, you are aware of ways to keep your food and yourself safe. Do an inspection at home, school and even your favorite restaurant. Do you see anything that can be done to better protect yourself or your family? Write down what you observe and make recommendations based on what you have learned.

ACTIVITY: HOLIDAY TIME

You are preparing a holiday feast. Using your *Sun Sentinel Digital Edition* or www.sunsentinel.com, print out pictures of all the foods you will serve your guests. Write a short paragraph next to each food describing how you will safely prepare each item.

ACTIVITY: PUBLIC SERVICE ANNOUNCEMENT

Using the *Sun Sentinel,* cut out words, phrases, pictures, or drawings to design a public service message promoting the importance of personal hygiene. The message can consist of a poster, collage, poem, or song. Share your message with your classmates.

Sunshine State Standards: Language Arts: W.5.7, W.5.8, W.5.2, W.5.1, W.5.2, SL.5.4, SL.5.5
Visual Arts: VA.5.S.1.3,VA.5.S.3.1 Health: HE.5.B.1.3, HE.5.P.2.1

KNOW YOUR NUTRIENTS

Foods supply your body with nutrients, the materials your body needs for good health. Your choices should be determined by how rich each food is in the various nutrients you need to maintain good health.

There are 6 major groups of nutrients.
Know them – they are what fuel your body!

WATER – Water carries other nutrients to the body's tissues and transforms food into energy and building material. Water also carries away waste and cools the body.
Sources: Drinking water, beverages, certain foods.

CARBOHYDRATES – Sugars and starches are carbohydrates. Carbohydrates supply energy that enables the body to do its work.
Sources: Most foods, milk, fruits and vegetables contain carbohydrates as sugar. Breads, beans, grains, pasta and potatoes contain carbohydrates as starches.

Good vs. Bad Carbs
You often hear people talking about "good" vs. "bad" carbohydrates. In simple terms, the technical term for "good" carbs is complex carbohydrates, and the technical term for "bad" carbs is simple carbohydrates. Simple carbs are said to be high glycemic, and complex carbs are low glycemic. The term "glycemic" refers to the amount and speed a food will raise blood sugar and insulin levels.

The goal is to maintain steady levels of blood sugar and insulin for health and energy, which happens most effectively when you eat carbohydrates that have a low glycemic index. As a result, you should avoid foods that contain simple carbs, such as white bread, white rice, pasta, and typical junk food that is high in sugar. You should include foods like oatmeal, whole wheat bread, brown rice and other whole grain foods in our diets because they contain complex carbohydrates.

FATS – Fats are a form of very concentrated energy. They are made up of glycerol, (a kind of alcohol) and fatty acids.
Sources: Plant oils, meats, fish, dairy foods and peanuts.

PROTEINS – Proteins supply energy and building material for muscles, hair and skin. Enzymes are proteins and are present in every cell in the body. Enzymes help to speed up chemical reactions. Proteins also fight diseases and act as chemical messengers.
Sources: Eggs, lean meat, fish, milk, cheese, nuts, certain vegetables and grains.

MINERALS – Minerals are important for maintaining body structures and fluids. They are also necessary for growth. Different minerals do different jobs in the body. Some minerals help form bones and teeth; others help make hemoglobin (a molecule in red blood cells that carries oxygen), and they also help enzymes to function properly.
Sources: There are minerals in many foods. Milk contains a mineral called calcium. Green, leafy vegetables contain magnesium. Bananas contain potassium and meat contains iron.

VITAMINS – Vitamins control the chemical processes that turn food into energy and body tissue. Here are some vitamins and the jobs that each of them does in the body:

Vitamins

A – Healthy skin and bone development.
B1 – Changes starch and sugar into energy.
B2 – Helps the body use food.
Niacin – Enables cells to use carbohydrates.
C – Helps to maintain supportive tissue in the body.
D – Helps the body use calcium.
E – Helps maintain cell membranes.

Sources: Vitamin A is found in milk and green, leafy vegetables. Vitamin C is found in citrus fruits, such as oranges, and potatoes. Vitamin E is found in vegetable oil and whole-grain bread.

ANTIOXIDANTS - Antioxidants are the natural substances found in fruits and vegetables that balance out the oxygen levels in our body's cells. Too much oxygen, like too much of anything, can be harmful. Antioxidants are helpful in fighting off cancer, heart disease, degenerative eye diseases, and they boost the immune and nervous systems. The National Cancer Institute and the National Academy of Science both recommend that you eat at least 5-9 servings of fruits and veggies everyday.
Sources: prunes, raisins, berries, oranges, grapefruit, grapes, kiwi, spinach, kale, brussels sprouts, broccoli, beets, red peppers, carrots, tomatoes, green tea.

ACTIVITY: VITAMINS AND MINERALS

Look at the contents listed on a label of a box or bottle of vitamins. Ever hear of selenium? molybdenum? niacin? The list of ingredients is long but each of these elements plays a role in keeping you healthy. It is important to know what and why you need these vital nutrients.

Choose at least 3 of the vitamins or minerals that are new to you. Research each. What are they exactly? In what foods are they most plentiful? Why are they important for good health? Report to you class on your findings.

ACTIVITY: JUST FOR FUN

1. Spend an afternoon with your friends going to 3 or 4 fast-food restaurants or kiosks, check out the food court at the mall or take a virtual trip to several fast food restaurants on line. See if you can discover which of their menu items has the most calories and which has the least. Which options seem the healthiest to you?

2. Research to support your guesses. Which 10 foods are considered the worst for high fat, sugar, additives or salt content. Opinions vary but you can come up with a list. Guess the worst beverages. Then do the opposite, find the best foods and drinks for good health.

24 SUPER FOODS

Want the most from your foods? Eat these Super Foods for maximum benefit!

APPLE
High in antioxidants (mostly in the peel)

AVOCADO
Healthy unsaturated fatty acids

BEANS
Low-fat healthy proteins

BLUEBERRY
Fruit highest in antioxidants

BROCCOLI
Best anti-cancer food

CINNAMON
Balances blood sugar

CHOCOLATE, DARK
Cocoa is high in antioxidants

DATES
Full of iron, potassium, folate

HONEY
Antioxidant, fights bacteria, fungus

KIWI
High in Vitamin C contents

OATS
High in fiber, proteins

OLIVE OIL
Healthy unsaturated fatty acids

ONION, GARLIC
High in flavonoids, anti-inflammatory

ORANGE
Vitamin C

POMEGRANATE
Antioxidant, anti-inflammatory

PUMPKIN
High in carotene

SOY
Complete plant protein, anti-cancer

SPINACH
Fights heart diseases, cancer

TEA
Protects against cancer forms

TOMATO
Fights cancers

TURKEY
Low-fat, lots of protein, Vitamin B

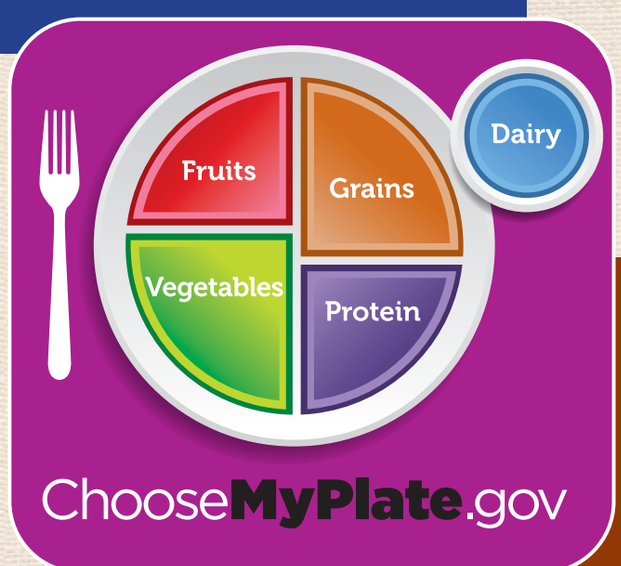
WALNUT
Omega-3 fatty acids, Vitamin E

WILD SALMON
Omega-3 fatty acids, Vitamin D

YOGURT
Strengthens the immune system

THE FEDERAL GOVERNMENT HAS PROVIDED GUIDELINES FOR HEALTHY EATING.

They have designated 5 major food groups: grains, vegetables, fruits, dairy, and protein foods. They have developed a graphic in the form of a dinner place setting with the plate being a pie graph showing the proportion of each food group you should eat each day and the dairy appearing to be the glass (of milk)! If you select foods from these groups and follow the healthy eating guidelines, you should be on the straight path to good health.



ACTIVITY: A BALANCING ACT

Go to www.choosemyplate.gov/foodgroups and click on each individual group. Based on what you discover, plan out a menu for you and your family for one week.

Create a poster featuring the foods from the 5 major food groups to share with younger students to help them understand the importance of healthy eating. With your teacher's permission, present your poster to some younger students.

Sunshine State Standards: Language Arts: W.5.1, W.5.7, W.5.8, SL.5.4, SL.5.5, W.5.7 Health: HE.5.P.1.1, HE.5.P.1.2, HE.5.P.1.3 Visual Arts: VA.5.S.1.3, VA.5.S.3.1

HEALTHY EATING GUIDELINES

- Don't skip breakfast. Your metabolism slows down at night, and won't speed up again until you eat something.
- After eating, brush and floss your teeth. This discourages eating again.
- Chew sugarless gum instead of looking for another snack.
- Eat slowly. You will enjoy your food more and have better digestion.
- Drink 1 or 2 glasses of water during your meal to make you feel fuller.
- Eating low fat/low calorie foods does not mean you can eat all you want.
- Get regular exercise.
- At fast-food restaurants, read the information on calorieand fat content.
- Stick to items under 300 calories total; stay away from fried foods.
- Eat smaller portions, stick with salads, drink water or juice instead of soda.
- Take your food "to go." Don't be tempted by seconds.
- Try grilled chicken or fish sandwiches, whole wheat rolls, small baked potato, salad, children's portions fat-freeor low-fat milk, or yogurt and fruit parfaits.

If you do these simple things, you aren't dieting, you are practicing healthy eating.

THINK ABOUT IT:

Choose this menu, and you will consume most of the 24 super foods in one day! Try variations of these healthful foods or add at least one per day to your diet.

- **Breakfast: plain yogurt mixed with a honey and cinnamon, walnuts and blueberries**
- **Lunch: a turkey sandwich with avocado, tomato and fresh spinach**
- **Snacks: apple, orange or kiwi**
- **Dinner: wild salmon cooked with olive oil beans with onion and garlic, and broccoli**
- **Dessert: a little dark chocolate or a handful of dates**
- **Drinks: tea or soy milk**

ACTIVITY: YOU HAVE OPTIONS

Look through the SPORTS section of the *Sun Sentinel Digital Edition*. How many sports activities appear? Make a list. Brainstorm with your class any others you can think of and add them to your list. Put a check mark next to your top 3 choices. Keep your list handy.

For 1 week, write down how much time you spend each day watching TV, movies, DVDs, texting or talking to your friends on the phone, and cruising your computer. Are you spending under 1-2 hours? Any more than that, think about limiting these sedentary activities and instead using 30-60 minutes to engage in one of the choices on your list.

Sunshine State Standards:
Language Arts:W.5.7, RF.5.4, RL.5.1, SL.5.1.
Health: HE.5.P.1.1, HE.5.P.1.2, HE.5.P.1.3

MOVE IT!

The evidence has been piling up: for a healthy life you need exercise in your daily routine. The human body is designed for movement and physical activity. Exercising:

- helps keep your weight under control
- boosts your energy level
- improves your self-image
- increases muscle strength
- releases tension and stress
- helps you to sleep better
- can be a lot of fun!

The key is to find the exercise that is right for you. You can choose to exercise alone or with a buddy (swimming, bicycling, jumping rope, walking, dancing); you can play a team sport (basketball, baseball, volleyball, hockey). Whatever you choose, it should take you 30-60 minutes per day, 5 or 6 days per week. You do not have to work out until you feel pain or fatigue to gain benefits, but you should feel the effort and you want to find it enjoyable.

ACTIVITY: EXERCISE CHECK-UP GRAPH

One way to determine just how active you are is to track it by writing it down. Make a graph like you see below to keep track of one week's worth of physical activity. This can include anything from regular exercise to climbing stairs to vacuuming your bedroom. Fill in the graph with each activity, and give yourself points as shown in the example below.

Activity	Frequently (2 points)	Sometimes (1 point)	Never (0 points)
Use the stairs			
Walk to School			
Swim			
TOTAL POINTS FOR WEEK			

How many total points do you have?

18-24 points - you are very active.
12-18 points - you are active but could do more.
Below 12 points - you need to get moving. Start simply, with a short walk or bicycle ride, but start.

WHAT'S METABOLISM?

Have you ever heard anyone say "I have a slow metabolism" or "I have a really fast metabolism"? Did you wonder what they meant?

Simply put, living things need energy to survive. Energy doesn't just float around in the air in a form we can use to live on. Our energy for living comes from the food we eat. Once we eat, the chemical process called "digestion" begins. That process and its related chemical reactions are called "metabolism." Metabolism is the total of all the chemical reactions an organism needs to survive.

If your metabolism is "high" or "fast," energy from your food is burned or used up at a more rapid rate. People with a high metabolism generally are on the thin and trim side. If you have a "low" or "slow" metabolism, energy is used up more slowly. You will tend to be overweight, sometimes severely so.

One of the best ways to boost your metabolism we have mentioned before: exercise. When you exercise you build muscle mass while reducing body fat. The more muscle you have, the more calories you burn, which boosts your metabolic rate. If you exercise and continue to make healthy food choices, you have a much better chance of maintaining a healthy weight.

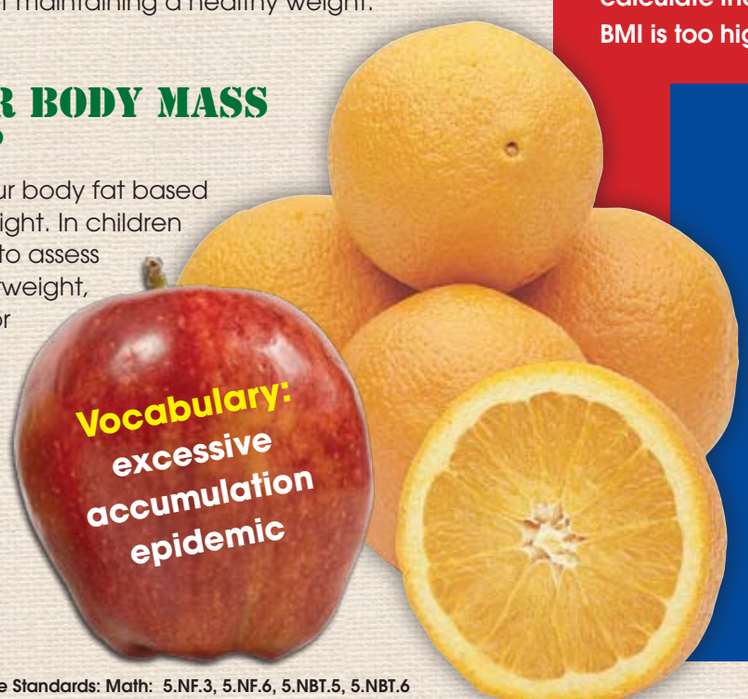
ACTIVITY: CALCULATING YOUR BMI

The standard formula is:
Weight in pounds, divided by Height in inches, divided by Height in inches again, times 703 = BMI. On a piece of paper, solve the equation using your measurements. Check your calculations with a calculator.

Another option is to go to the website:
www.nhlbisupport.com/bmi/bmicalc.htm.
This site has a BMI calculator on the home page and will calculate the information for you. It will also tell you if your BMI is too high or too low for your age.

WHAT'S YOUR BODY MASS INDEX (BMI)?

BMI is a measure of your body fat based on your height and weight. In children and teens, BMI is used to assess whether you are underweight, overweight, or at risk for being overweight. It is one tool to help determine if you are at a good weight for you.



ACTIVITY: BE A SUGAR DETECTIVE

Check the labels of items stored in your pantry. See how many different ways sugar is included in foods without saying "sugar" (for example, "corn syrup"). You may need to do some research to discover how many different terms there are for sugar.

Extension: Check out the sugar-free products in your supermarket. Are they truly sugar-free? Make a list of the products you find that have "hidden" sugar, and write a letter to the manufacturer convincing them to be clearer in labeling these items.

Sunshine State Standards: Math: 5.NF.3, 5.NF.6, 5.NBT.5, 5.NBT.6
Language Arts: W.5.7, RF.5.4, RL.5.1, SL.5.1 Health: HE.5.P.2.1

COMMON HEALTH ISSUES IN CHILDREN

Childhood obesity,and diabetes are two of the most common health issues affecting children today.

- According to the Centers for Disease Control and Prevention, 16% of children 6-19 year old (over 9 million) are overweight or obese -- a number that has tripled since 1980!
- Over the past 3 decades the childhood obesity rate has more than tripled for children aged 6-11 years.
- Overweight adolescents have a 70% chance of becoming overweight or obese adults This increases to 80% if one or more parent is overweight or obese.

WHY IS THIS HAPPENING?

Causes:

- Heredity – if your parents are both obese there is a strong chance you may also become obese.
- Eating habits – obese parents may model poor eating habits and may have too many sugar-loaded and fatty foods in the house.
- Lack of physical exercise – couch potatoes sitting in front of the TV munching on snacks are good candidates for obesity.

Associated Problems:

- Cardiac (heart) ailments – increased average blood pressure and heart rate.
- Orthopedic problems – bowed legs and aches and pains in the lower joints from carrying excess weight.
- Skin disorders – heat rash and acne.
- Diabetes.
- Psychological stress from bullying and harassment by peers and other people.

Prevention:

- Physical activity: formal exercise programs or simply becoming more active helps to burn fat, increase energy, & keep lost weight away.
- Diet management – balanced diets and nutritional foods combined with exercise.
- Good behavior habits – self-monitoring and recording what you eat, eating more slowly, and limiting the time and place of eating. (For example: allow yourself 30 minutes at the dinner table instead of munching all night in front of the TV).

COMPONENTS OF A SUCCESSFUL WEIGHT LOSS PLAN

(with strict medical supervision and parental approval):

- Setting a reasonable weight loss goal – initially 5–10 pounds or a rate of 1–4 pounds per month.
- Dietary management – follow a diet suggested by a doctor or nutritionist with a specific number of calories and a balance of these calories from the right fat, protein, and complex carbohydrates.
- Physical activity – begin slowly, working up to 20 to 30 minutes a day in addition to any school activity.
- Good behavior habits – self-monitoring, nutritional awareness, modified eating habits, physical activity, and attitude changes.
- Remember what we said earlier: take it slowly and one step at a time.

OTHER DISEASES YOU MIGHT FACE

DIABETES

Diabetes is also reaching epidemic levels in the U.S. Approximately 21 million people in the United States have diabetes. It is a disease where the body does not produce or properly use insulin. Insulin is a hormone made by the pancreas, which is needed to convert sugar, starches, and other food into energy necessary for day-to-day living.

Type 1 Diabetes was once known as juvenile diabetes. It is usually diagnosed in children and young adults. Basically, the body does not produce insulin, which is necessary for the body to use sugar. Insulin carries sugar, the basic fuel for the body's cells, from the blood into the cells.

Type 2 Diabetes is the most common form of the disease. Either the body does not produce enough insulin or the cells ignore the insulin.

Symptoms: Frequent Urination, Excessive Thirst, Extreme Hunger, Unusual Weight Loss, Increased Fatigue, Irritability, Blurry Vision, Itchy Skin, Tingling or Numbness In Hands and Feet, Hard-To-Heal Skin, Gum, or Bladder Infections.

If you have any of these symptoms, talk to your parents, the school nurse, or your family doctor right away.

Associated Ailments:

- **Heart disease – increased risk for heart attack, stroke, and complications related to poor circulation**
- **Eventual blindness**
- **Kidney disease/failure**
- **Neuropathy – damage to the nerves that run throughout the body connecting the spinal cord to muscles, skin, blood vessels, and other organs**
- **Skin problems – these may be a first sign of diabetes**
- **High risk for gum disease**
- **Foot problems – numbness caused by nerve damage or poor circulation**
- **Eating disorders – anorexia and bulimia**

HEALTHY CELEBRATIONS

Parents can help schools promote a healthy learning environment by providing celebrations that shift the focus from the food to the child. Here are some ideas:

- Send in a game or craft that children can make.
- If you are sending in food, make it count. Contribute healthy choices.
- Incorporate a fun nutrition lesson by involving your child at home when planning and preparing healthy snacks.
- Check out http://nutrition.dadeschools.net for ideas and links to other good nutrition sites.

IT DOESN'T HAVE TO BE COMPLICATED

Putting together healthy foods for a class celebration is not hard at all. In fact, simple works best and you don't have to make those two dozen cupcakes at the last minute!**

- Fruit smoothies: berries, bananas, pineapple
- Fresh fruits: fruit and cheese kabobs; fruit salad; fruit with low-fat whipped topping
- Dried fruit: raisins, cranberries, apricots, banana chips; 100% fruit snacks
- Regular or flavored low-fat or fat-free milk; 100% juices or water
- Veggie trays with low-fat dips: celery and carrots with peanut butter and raisins
- Whole grain crackers with low-fat cheese cubes or low-fat string cheese
- Fat-free pretzels, low-fat or air-popped popcorn; rice cakes
- Angel food cake, plain or topped with fresh fruit
- Use the low-fat versions of pudding, yogurt, yogurt parfaits or banana splits. For example, layer yogurt and fruit together and top with non-sweetened cereal, granola, or crushed graham crackers
- Baked tortilla chips with salsa or bean dip
- Trail/cereal mix made from whole-grain, low-sugar cereals mixed with dried fruits and fat-free pretzels
- Fresh fruit with low-fat yogurt dip
- Hummus with whole-grain crackers or fat-free pretzels

CELEBRATE THE CHILD

- Plan special party games and activities. Provide game supplies, pencils, erasers, stickers, and other small school supplies instead of food.
- Ask the teacher if he or she can give the children extra recess time instead of a party. The birthday child can choose & lead an active game for everyone.
- Instead of food, purchase a book for the classroom or school library in your child's name. Go to school with your child and read the book to his class.
- Organize a special community service project. For example, invite a group of senior citizens to eat in the cafeteria with your child's class. Make "curechiefs" for chemotherapy patients or blankets for rescue dogs.
- Bring in material for the class to create a "Celebrate Me" book. Classmates can write stories or poems, or draw pictures to describe what is special about the birthday child.

Adapted by Miami-Dade County Schools and Sun Sentinel with permission from Healthy Celebrations, Connecticut State Department of Education, May 2005 (Revised February 2007).
http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=320754#Resources

ACTIVITY: PARTY MENUS

Pretend you are going to have a classroom celebration. You have the two following menus from which to choose, but you must first analyze each item for certain contents:

Number of calories
Amount of sugar
Amount of fat
Amount of sodium
Available nutrients

Menu A:
One regular cupcake with frosting
One 6 oz. candy bar
A 12 oz. can of soda (not diet)

Menu B:
One cup low-fat, fruit-flavored yogurt
One apple
One cup (8 oz.) serving of non-fat milk

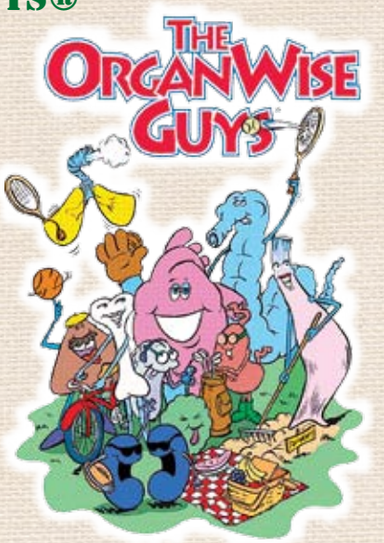
- **Based on the 5 measurements in you analysis, which menu is the better choice?**
- **If you had a limit of 500 calories per student, could you make any additions to either menu?**
- **Look in the *Sun Sentinel* FOOD section, Publix Super Markets insert or other source for the cost of each item from the two menus. Which menu costs more to serve?**

Sunshine State Standards: Math: 5.NBT.5, 5.NBT.6 Language Arts: W.5.7, W.5.8

A "WOW" IDEA!

THE SCHOOL DISTRICT OF PALM BEACH COUNTY - THE ORGANWISE GUYS®

This year, the District is welcoming The OrganWise Guys® into all elementary schools! With the help of: Sid and Kid Kidney Brothers®, Sir Rebrum®, Pepto the stomach®, Peri Stolic®, Windy Lungs®, Hardy Heart®, Madame Muscle®, Calci M. Bone®, Peter Pancreas®, and Luigi Liver® these fun characters teach children how to be healthy and smart from the inside out. A different food group and character(s) are the focus of each month's educational campaign through the use of posters, buttons, handouts, newsletters and menu marketing.



By bringing the body to life via lovable organ characters, kids of all ages learn what it really means to be smart from the inside out as well as teaching them about the negative impact of poor nutrition and lack of physical activity on each, individual organ (wise guy).

Dr. Michelle Lombardo, founder and President of OWG, Inc. stated that "The OrganWise Guys® curriculum, when combined with school meal programs, helps children live healthier lives and score higher on standardized tests than children who have not been part of the program."

In addition, our School Food Service Managers use creative approaches to infuse The Organ Wise Guys® program into their schools, by hosting assemblies with the students in kindergarten to fifth grades as well as going into the classrooms to educate students about eating healthy. Visit our website for more information **www.palmbeachschools.org/sfs** *Information and photo provided by Palm Beach County School Food Services Department.*

GREAT WEBSITES

There is a wealth of information online about food safety, health, nutrition and even simple recipes. Try some of these:

www.choosemyplate.gov
(this is your go-to source)
www.dole5aday.com
www.nutritionexplorations.com
www.kidshealth.org
www.floridajuice.com
http://children.webmd.com/guide/kids-healthy-eating-habits
http://www.learntobehealthy.org/health-education/healthy-eating.aspx
http://www.kidnetic.com/
www.nal.usda.gov
www.nutrition.com
www.pueblo.gsa.gov
www.primusweb.com/fitnesspartner
www.healthyeatingadvisor.com
www.fda.gov
www.nutrition.about.com
www.shapingamericasyouth.org
www.fightbac.org
www.cdc.gov
www.fsis.usda.gov
www.food.com
http://nutrition.dadeschools.net
www.palmbeachschools.org
www.browardschools.com

~ WE BELIEVE ~

Education is a powerful tool in building promising futures.

That's why we're proud to support those ensuring that others are given the chance to succeed.

PUBLIX SUPER MARKETS

CHARITIES