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INSERT TO GROW, GLOW AND GO
LEADER'S GUIDE HE 11-234

This insert was written to: 1) Update the nutrition information in the Grow, Glow and Go series, and 2) provide an activity for each of the lessons for teachers who do not use the food preparation option.

NUTRITION

We have always taught nutrition from the background of preventing deficiencies. Today, the number one nutrition problem in this country is OVERWEIGHT. In order to be able to deal with over consumption, a fifth group has been added to the food groups. This group includes those foods that are high in sugars, fats and alcohol.

Each of the basic food groups--unchanged from the BASIC FOUR--has a minimum number of servings recommended. The fifth group has a CAUTION sign instead of a number. This is to tell individuals that these foods are high in calories and low in nutrients. The selection of these foods should be made AFTER all the other groups have been included in the diet. Include only enough of these foods to meet the energy (calorie) needs of the individual.

Variety is a keyword in nutrition. These lessons encourage children to eat and enjoy a variety of foods that will meet the nutrient requirements of the body. The kind and amount of food a person eats affects health, growth, and the way you feel. Nutrition is one of the factors that influences the lifelong health of individuals. If children choose the foods that will supply the needed nutrients, they will have a greater chance of achieving optimum health.

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LESSON I

Revisions

Under Materials Needed:

- Substitute 1/4 slice of whole wheat bread for soda crackers; 7 slices of bread per classroom.
- Eliminate uncooked weiner

Introduce the fifth food group, the Sweets and Fats Group. This group should be eaten in moderation. There is no required number of servings. Students must be cautious about eating too many foods from this group. Eating too many foods from the Sweets and Fats Group could cause children to become overweight.

The following foods belong in the Sweets and Fats Group:

Soda pop	Cookies	Potato chips	Pies
Fruit turnovers	Corn curls, puffs,	Doughnuts	Butter
Sugar	chips	Candy	Margarine
Honey	Punch	Gum	
Oil	Jam, jelly	Fried foods	

Activity Option (follows Lesson Procedure material)

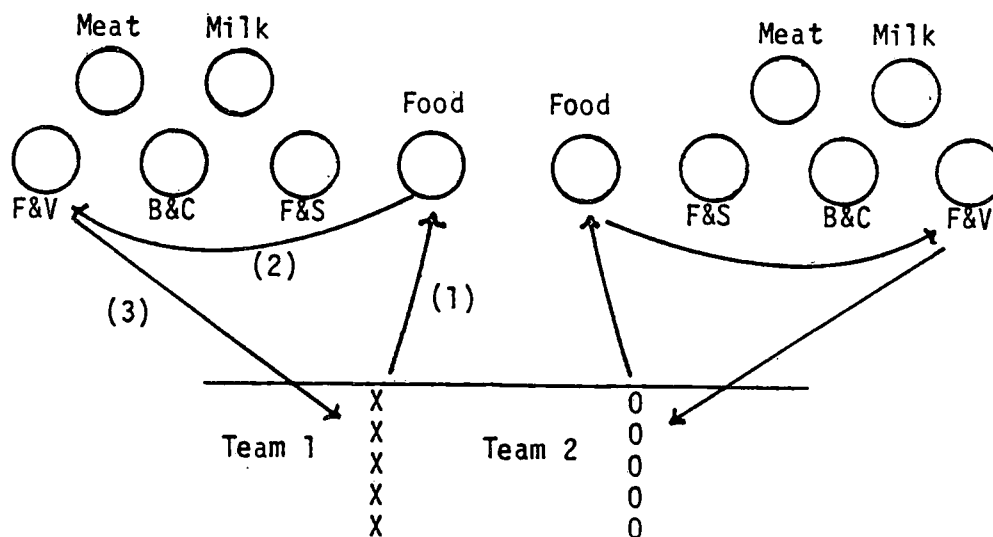
BASIC FOOD GROUP REPLAY

Equipment

Six paper plates, six labels attached to plates per team. Labels to be marked Food, Meat, Milk, Fruits and Vegetables, Bread and Cereal, Fats and Sweets. Pictures of food or Dairy Council food models (six pictures per food group) for each team.

How to Play

1. Divide group into two teams. Arrange paper plates and teams as shown below:



2. Mix the 30 food pictures and place them on the food plate for each team.
3. Have one player from each team run to the food plate, select a picture and place it on the correct food group plate.
4. Award one point to the team that finishes first and one point for each food that is correctly categorized.
5. The team with the most points wins.

FOOD GROUP TRAIN

(See instructions for this game starting on page 5 of introductory section)

This activity may be too elementary for your class. If so categorize the foods into groups without using the train. Remember to include the fifth group Sweets and Fats.

LESSON II

Revisions

Under Review section:

- Include the fifth food group, Sweets and Fats in this section.

Activity Option (follows Lesson Procedure material)

VEGETABLE RECALL

Equipment

None

Purpose

To acquaint the students with a variety of food in the Fruit and Vegetable Food Group.

How to Play

Divide the class into two groups. Start with group on one side of the room. They must name a food that is a vegetable within 10 seconds. Once this is accomplished it is the other sides turn, and the process is repeated. Foods cannot be repeated. Each side should act as a team so that no individual student is put on the spot. If one student does not have the answer the team can help. The side that cannot come up with a correct food within 10 seconds loses. Repeat the activity with vegetables that contain Vitamin A, and vegetables that contain Vitamin C.

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LESSON III

Revisions

The Dietary Guidelines encourage people to eat more whole grain breads and cereals. This should be stressed throughout the lesson.

Activity Option (follows Lesson Procedure material)

Bring several different cereals to class. Break the class into four groups. Have each group rank the cereals from 1 to 10 according to the amount of sugar they have:

- 1 = the most sugar
- 10 = the least sugar

Use the information, on the next page, on cereal and sugar content as a guide.

According to the Center for Science in the Public Interest, these cereals contain the following percentages of sugar:

	%		%
King Vitamin.....	50	Corn Chex.....	14
Cocoa Pebbles.....	44	Life.....	14
Fruity Pebbles.....	44	Product 19.....	12
Super Sugar Crisp.....	43	Total.....	11
Sir Grapefellow.....	40	Concentrate.....	11
Post Alpha-Bits.....	40	Wheaties.....	11
Cocoa Krispies.....	38	Special K.....	9
Captain Crunch.....	37	Corn Flakes.....	7
Fruit Loops.....	35	Rice Krispies.....	7
Super Sugar Corn Chex....	33	Post Toasties.....	7
Mr. Wonderful Surprise...29		Raisin Bran.....	6
Sugar Frosted Flakes....29		Wheat Chex.....	6
Post Oat Flakes.....	20	Rice Chex.....	5
100% Natural.....	19	Cheerios.....	4

Discuss:

- Sugar has only calories--no vitamins or minerals.
- It is easier to know how much sugar you eat if you add it yourself.
- Package labeling--help the children understand how sugars can be disguised with different names such as honey, brown sugar, dextrose, fructose, sucrose, corn syrup, invert sugar, maltose, molasses and syrup.

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LESSON IV

Revisions

Under Materials Needed, replace original materials with the following list for each child:

- | | |
|-------------------------------------|--|
| 4 ounces milk (2%) | 1 or more tablespoons |
| 4 ounces reconstituted orange juice | 1 toothbrushing model from dentist's office (if available) |
| 6 ice cubes (optional) | 5-9 different size glasses |
| Paper cups | 1, 8 oz. measuring cup. |
| Lesson IV Handout | Food coloring (optional) |
| Disclosure tablets | |

Under Lesson Procedure substitute Orange Blossom Shake for Chocolate Milk Treat in Step #7:

ORANGE BLOSSOM SHAKE

- | | |
|-------------------------------------|------------------------|
| 4 ounces milk | 6 ice cubes (optional) |
| 4 ounces reconstituted orange juice | |

Stir milk and orange juice thoroughly. If a blender is available, mix ice cubes, juice, and milk. Serve cold.

Under Lesson Procedure, Step #9, change the chocolate cookie experiment. Instead of using the chocolate cookies, go to a local dentist and ask for a donation of disclosure tablets for each child. Go through the exercise substituting disclosure tablets for the chocolate cookies.

In Step #10, under Lesson Procedure, encourage the children to try the eggnog recipe, on the Lesson IV Handout, at home.

Ask a local dental hygienist to come in and talk about dental hygiene.

Activity Option(follows Lesson Procedure material):

CALCIUM IN BONES

Equipment

Chicken bones (from cooked chicken), vinegar in bottle

Purpose

To learn why calcium is important for our bodies.

How to Play

Take a clean chicken bone, cover it with vinegar in a small bottle. Tell the students that you plan to leave it for a week in the bottle. Examine the progress of the chicken bone in the bottle daily. Help the students think why the chicken bone is hard (calcium works with Vitamin D and Phosphorus to build strong bones.) Next anticipate what effect the vinegar and acid might have on the bone (vinegar tends to dissolve out the calcium, softening the bone). This is an over-simplified way to illustrate the importance of calcium to the formation of good strong bones. The students will notice during the week's soaking that the bone becomes more and more pliable and will bend easily at the end of the week. End of experiment.

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LESSON V

Revisions

Under Lesson Procedure add:

10. Discuss the average American diet. It is made of:

45% fat
16% protein
23% refined sugar
16% other carbohydrates

The Dietary Guidelines recommend that we eat:

30% fat
12% protein
10% refined
58% more carbohydrates with no more
than 10% of them from sugar

Activity Options(follows Lesson Procedure materials)

FAT CONTENT IN COMMON FOODS

<u>Desserts and Sweet Snacks</u>	<u>Size</u>	<u>Teaspoons of Fat</u>
Pecan pie	1/6 of a 9" pie	6-1/2 teaspoons
2 glazed doughnuts	3-3/4" x 1-1/4	4-1/2 teaspoons
Apple pie	1/6 of a 9" pie	3-1/2 teaspoons
Ice cream		
Premium	16% fat, 8 oz.	5 teaspoons
Regular	11% fat, 8 oz.	3 teaspoons
Ice Milk	4.3% fat, 8 oz.	1 teaspoon
4 chocolate chip cookies	2-1/3" diameter	2-1/2 teaspoons
Cake, yellow, 2-layer with chocolate frosting	1/10 of a cake	2-1/2 teaspoons

Other Snacks

Potato chips	40 chips, 2" diameter	6-1/2 teaspoons
French fries	Large order	3-1/2 teaspoons

Fast Foods

3 pieces fried chicken dinner with fries, milk shake and roll		9-11 teaspoons
Large hamburger	1/4 lb. to 1/3 lb.	6-7 teaspoons
3 pieces of fried fish		5-1/2 teaspoons
Egg breakfast sandwich		4 teaspoons
Apple pie		4 teaspoons
Pizza	1/2 of a 10" pizza with pepperoni topping	3-1/2 teaspoons

Meat Group Foods

Bologna	4 oz.	6-1/2 teaspoons
Frankfurter	3-1/2 oz.	5 teaspoons
Bacon	3 slices, 2.5 oz.	5 teaspoons
Peanut butter	3 tablespoons	5 teaspoons
Eggs	2 large	2-1/2 teaspoons
Turkey	2 oz.	1/2 teaspoon
Shrimp	3 oz.	1/4 teaspoon
Crab	3 oz.	1/4 teaspoon

(All of the above amounts
equal 1 serving from the
Meat Group)

Milk Group

Egg nog	8 oz.	4 teaspoons
Cheddar cheese	1-1/2 oz.	2 teaspoons
Milk, whole	8 oz.	1-1/2 teaspoons
Milk, 1%	8 oz.	1/2 teaspoon
Milk, skim	8 oz.	1/4 teaspoon

Have students measure teaspoons of shortening to represent fat. Place shortening on labeled plates to represent the amount of fat in each food. Compare Meat Group foods.

LESSON VI

Revisions

Under Review, review the fat content of foods

Activity Option(follows Lesson Procedure materials)

Continue experiments with the Fat Content of Common Foods from Lesson VI.

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LESSON VII

Revisions

None

Activity Option (follows Lesson Procedure materials)

Equipment

One box of cocktail size sugar cubes; 2 cubes = 1 teaspoon sugar. Have the class guess how many sugar cubes are in common snack foods. Choose one student to place the sugar cubes on a plate representing the selected snack food. Use the foods listed below:

HIDDEN SUGAR

<u>Item</u>	<u>Cubes</u>	<u>Teaspoons</u>
Soft Drink		
* Big Drink (32 oz.)	52	26
* Large glass (16 oz.)	26	13
Apple pie (1/6 pie)	24	12
Fruit yogurt (8 oz.)	16	8
Catsup (1 tablespoon)	2	1
Glazed doughnut (2)	24	12
Chocolate cake (large piece) with frosting	30	15
Jello (8 oz.)	18	9
Ice cream (8 oz.)	24	12

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LESSON VIII

Revisions

Under Lesson Procedures, Step 6, reduce the corn syrup amount from 1 cup to 1/3 cup.

Activity Option (follows Lesson Procedure materials)

NUTRITION SQUARES

Equipment

A tic-tac-toe grid (drawn on transparency, newsprint, blackboard, etc.); questions made up for the game; a pen or pencil for marking X's or O's on the grid.

Purpose

To stimulate interest in and/or discussion of nutrition or nutrition-related facts.

How to Play

1. Choose 9 players with "star status" to serve on the grid; 2 players as contestants, designated as X or O; a moderator and a score keeper.
2. The game is similar to the Hollywood Squares game played on television. The object is to place an X or O in three squares to form a straight line either vertically, horizontally, or diagonally.
3. The name of each student with "star status" is placed in a block on the grid (see diagram below).

Sue	Mark	Jane
Don	Karen	Debra
Benny	Carol	Louis

4. One person serving as a contestant will choose a student-star on the Nutrition Squares grid. The moderator poses the question to the student-star, who from his knowledge can either answer correctly or incorrectly. The contestant must then decide to accept or reject this answer. (A panel of student judges or the entire class might be used to confirm the answers for the game, depending on the size of the group.) If the contestant is correct in his decision, then he receives either an X or an O (depending on which symbol is representing him) in the appropriate square. If the contestant answers incorrectly, no mark is made and play proceeds to the other contestant and a new question. When a player is awarded three squares in a straight line, he or she is declared the winner.



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