

#### **Program Description**

In 2011-2012 Nurture created and piloted a new Elementary Nutrition & Wellness Program for first - fifth grade students. It included unique materials for each grade and was taught October - May. Topics were introduced monthly by Nurture teachers in 20-minute lessons. Many of the lessons were supplemented by Oak Terrace physical education and classroom teachers with activities provided by Nurture. Monthly parent handouts recapped the lessons with tips on how to reinforce the concepts at home and recipes the students could try at home. Approximately 400 Oak Terrace students participated.

Sixteen classes also received a seed starting lesson to encourage the students to eat more vegetables and so they could experience growing food themselves.



#### First Grade -- Four Classrooms

The focus areas were

- "Go" foods (nourishing foods providing long lasting energy) and "slow" foods (little nutritional value or high in sugar, unhealthy fats, or salt)
- Fruits and vegetables
- Energy balance
- Exercise

### Average 1st Grade Classroom Teachers' Ratings Showing Greatest Program Impact, May 2012 Scale: 1 = Not at all, 5 = A Great Deal

- 4.75 Overall the Nurture lessons have benefitted my students
- 5.00 Student awareness of nutrition concepts taught in the program has increased
- 3.67 Student attention to nutrition concepts has increased regardless of source (e.g. students talk or ask about nutrition based on something they saw in a non-Nurture lesson)
- 4.00 Students are bringing healthier snacks
- 3.75 Students are eating more or all of the fruits offered in class
- 4.25 Students are eating a greater variety or all of the fruits offered in class
- 3.75 Students are eating more of all of the vegetables offered in class
- 4.50 Students are eating a greater variety or all of the vegetables offered in class
- 3.67 Students are exercising more at school
- 3.67 Students are incorporating lesson concepts in their day to day lives

#### 1st Grade Classroom Teachers' Favorite Things about the Elementary Program

- "It takes a piece on once a month and is very focused. It also builds on each lesson passed."
- "The relation between go/slow foods and what is healthy. It was clear how food is like fuel."
- "Review of previous lesson. Simple, attainable vocabulary for age group and for English language learners. Creative writing/drawing opportunity (cartoon)."
- "Balance beam showing how to be balanced with food and exercises."

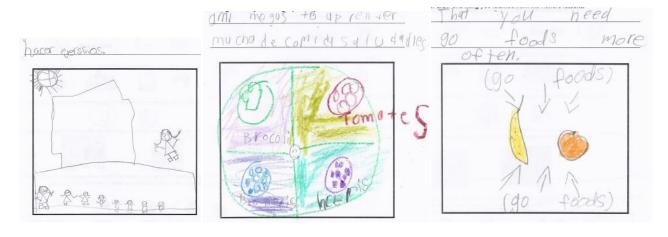
<sup>\*</sup>For knowledge questions, the correct answer is underlined, shows % of students choosing this.



1st Grade October and May Student A	ssessment Results	Responses*	Oct	May
Which of these foods is a "go" food?	Orange, French Fries,	Cookies, Candy Bar	89%	95%
Which of these foods is a "slow" food?	Yogurt, Banana, Sub S	Sandwich, <u>Candy Bar</u>	83%	92%
Where does food come from?	Grocery Store, Farm		33%	62%
How much of your plate should contain	fruits and vegetables?	All, ½, ¼, none	54%	59%
Which activity do you do most often?		Play video games	22%	8%
		Watch TV	13%	5%
		Play outside	17%	40%
		Read a book	49%	47%
Which kind of snack do you choose mos	st often?	Fruit	92%	90%
		Candy	8%	10%
What did you think of the Nurture lesson	ns?	I liked them a lot		77%
		Most of them were	good	9%
		Some of them were	good	10%
		I didn't like them		4%

#### Write or draw one thing you learned from the Nurture lessons (Some translated from Spanish)

- "I learned to go out and run in the grass."
- "We learned how cereal gets made."
- "Eating healthy food is good for your body."
- "I liked them a lot because I liked when we did yoga."
- "Planting and I learned about healthy foods."
- "I like vegetables. They are my favorite."
- "Eating candy is not healthy."
- "You need five glasses of water a day because most of your body is made of water."



<sup>\*</sup>For knowledge questions, the correct answer is underlined, shows % of students choosing this.



### Second Grade -- Four Classrooms

The focus areas were

- Eating a rainbow to get a variety of phytochemicals
- MyPlate and the food groups
- Healthy snacking
- Exercise and yoga



#### Average 2nd Grade Classroom Teachers' Ratings Showing Greatest Program Impact, May 2012

#### Scale: 1 = Not at all, 5 = A Great Deal

- 3.50 Overall the Nurture lessons have benefitted my students
- 3.75 Student awareness of nutrition concepts taught in the program has increased
- 3.50 Student appreciation of the importance of proper nutrition has increased
- 3.75 Students are making correct cause-and-effect linkages between healthy and unhealthy foods and their impact on health.
- 4.00 Students are bringing healthier snacks
- 3.75 Students are eating more or all of the fruits offered in class
- 4.00 Students are eating a greater variety or all of the fruits offered in class

#### 2<sup>nd</sup> Grade Classroom and P.E. Teachers' Comments on the Elementary Program

- "I like how you come in and teach the lessons. They are grade level appropriate."
- "They made a connection between nutrition and PE class."
- [My favorite thing about the Nurture program is it creates] "Awareness"

2nd Grade October and May Student Assessment Results	Responses*	Oct	May
How much of your plate should contain fruits and vegetables?	All, ½, ¼, none	49%	72%
Which of these is a "go" food that provides long lasting energy?	Chips, Cookies, <u>Yogurt</u> , Ice cream	77%	98%
Which of these is a "slow" food that may give you a quick burst of energy but then makes you feel tired?  Whole grain crackers and cheese, Turkey, Apple, Fried chicken nuggets		61%	56%
	7. 11		
How many minutes of physical activity should you have every day	y to have a healthy body? 15, 30, <u>60</u> , 90	16%	32%
Which food group do these foods belong to?	Lettuce = Vegetable	78%	90%
	Rice = Grain	46%	52%
	Grapes = Fruit	75%	95%
	Yogurt = Dairy	45%	81%
	Seeds & Nuts = Protein	32%	44%
Circle the snack that will give you the most long-lasting energy.			
Crackers and Juice, Cookies and Milk, Apple and String Cheese, Potato chips and Sports Drink		47%	85%

<sup>\*</sup>For knowledge questions, the correct answer is underlined, shows % of students choosing this.



2 <sup>nd</sup> Grade October and May Student Assessment Results - Behavioral	Responses:	Oct	May
During your free time which activity are you most likely to do?	Play video games	13%	5%
During your free time which activity are you most fixely to do:	Watch TV	3%	2%
	Play outside	23%	54%
	Read a book	37%	3%
	Play a sport	24%	37%
I have energy to play	None of the time	5%	2%
G, 1 ,	Some of the time	19%	14%
	Most of the time	18%	30%
	All of the time	58%	55%
I enjoy eating "go" foods	None of the time	2%	6%
, , , , , , , , , , , , , , , , , , , ,	Some of the time	23%	21%
	Most of the time	32%	20%
	All of the time	43%	53%
What did you think of the Nurture lessons?	I liked them a lot		62%
•	Most of them were goo	od	18%
	Some of them were good		17%
	I didn't like them		3%

- "Healthy snacks are good for you."
- "If you touch your neck you can feel your heart beat."
- "Do not eat a lot of food that is not healthy."
- "When we learned about getting a lot of energy."
- "Go foods are awesome!"
- "When we planted corn, lettuce, and beans."
- "When we painted MyPlate."



<sup>\*</sup>For knowledge questions, the correct answer is underlined, shows % of students choosing this.



### Third Grade - Five Classrooms

The focus areas were

- MyPlate and the food groups
- Breakfast and identifying "go" cereals
- Beverages and hydration
- Exercise and limiting screen time



#### Average 3rd Grade Classroom Teachers' Ratings Showing Greatest Program Impact, May 2012

(Based on four teachers since the 5th started halfway through the school year.)

### Scale: 1 = Not at all, 5 = A Great Deal

- 4.00 Overall the Nurture lessons have benefitted my students
- 4.00 Student awareness of nutrition concepts taught in the program has increased
- 4.25 Student attention to nutrition concepts has increased regardless of source (e.g. students talk or ask about nutrition based on something they saw in a non-Nurture lesson)
- 3.75 Student appreciation of the importance of proper nutrition has increased
- 4.00 Students are making correct cause-and-effect linkages between healthy and unhealthy foods and their impact on health.
- 3.75 Students talk about lesson concepts on non-lesson days.
- 3.50 I hear from parents or students that students talk about lesson concepts at home
- 3.75 Students are bringing healthier snacks
- 3.75 Students are bringing healthier lunches
- 3.75 Students are eating more or all of the fruits offered in class
- 4.50 Students are eating a greater variety or all of the fruits offered in class
- 4.25 Students are eating more or all of the vegetables offered in class
- 4.25 Students are eating a greater variety or all of the vegetables offered in class
- 4.25 Students are exercising more at home
- 4.00 Students are exercising more outside school
- 3.50 Students are incorporating lesson concepts into their day to day lives

#### 3rd Grade Classroom and P.E. Teachers' Comments on the Elementary Program

- [The lessons] "Made the kids think about nutrition."
- [It] "related to real life."
- [Parents say their favorite part of the program was: Their children] "learning about 'viewing time'."
- [Parents say their favorite part of the program was] "moms eat healthier, cook healthier foods, and exercise more."
- [PE comment] "I was impressed with what they all knew. They really seemed like they liked the Nurture lesson in the classroom."

<sup>\*</sup>For knowledge questions, the correct answer is underlined, shows % of students choosing this.



How many minutes of physical activity should you have every day to have a healthy body? 15, 30, 60, 90   Mich food group do these foods belong to?   Lettruce = Vegetable   91%   94%   97%	3 <sup>rd</sup> Grade October and May Student Assessment Results  How much of your plate should contain fruits and vegetables? All, ½, ¼, none	Responses*	Oct 56%	<b>May</b> 67%
Lettuce = Vegetable   91%   92%   71%   67apes = Froit   94%   95%   71%   67apes = Froit   94%   95%   70gurt = Dairy   47%   80%   80cds & Nuts = Protein   40%   56%   80%   80cds & Nuts = Protein   40%   50%   80cds & Nuts = Protein   40%   40%   40%   80cds & Nuts = Protein   40%	Thow much of your plate should contain fruits and vegetables: Thi, 72, 74, none		3070	0770
Rice = Grain   G7%   71%   95%   9	How many minutes of physical activity should you have every day to have a health	y body? 15, 30, <u>60,</u> 90	34%	45%
Carlot the beverage you should drink most often   100% Juice, Soda, Water, Sports Drink, Milk   13%   13%   14%   13%   14%   13%   14%   13%   14%   14%   13%   14%	Which food group do these foods belong to?	Lettuce = Vegetable	91%	92%
What does each food group do for your body?   Fruit & Veggies contains vitamins & minerals that help you stay healthy & help you heal if you get a cut or bruise   20%   43%   27%		Rice = Grain	67%	71%
Seeds & Nuts = Protein   40%   56%		Grapes = Fruit	94%	95%
What does each food group do for your body?   Fruit & Veggies contains vitamins & minerals that help you stay healthy & help you heal if you get a cut or bruise   26%   43%   43%   43%   63		Yogurt = Dairy	47%	80%
Protein is the building block that help you heal if you get a cut or bruise   26%   43%   27%   43%   27%   43%   27%   43%   27%   43%   27%		Seeds & Nuts = Protein	40%	56%
Protein is the building block that helps form strong muscles, hair and nails Grain gives your body energy Calcium contains calcium and vitamins that help build strong bones and teeth to 56% 56% 56% 56% 56% 56% 56% 56% 56% 56%	What does each food group do for your body?			
Carin gives your body energy   33%   27%		al if you get a cut or bruise	26%	43%
Calcium contains calcium and vitamins that help build strong bones and teeth   40%   56%   82%   60%			29%	44%
Circle the beverage you should drink most often.         100% Juice, Soda, Water, Sports Drink, Milk         69%         82%           Circle the cereal that will give you the most energy. (Only nutrition labels shown.)         68%         88%           During your free time which activity are you most likely to do?         Play video games Watch TV         4%         4%           Play video games Watch TV         9%         49%         4%         35%         49%         88         11%         33%         4%         33%         34%         33%         4%         33%         4%         33%         4%         33%         4%         4%         42%		~	33%	27%
Circle the cereal that will give you the most energy. (Only nutrition labels shown.)   68%   88%			40%	56%
During your free time which activity are you most likely to do?   Play video games   Watch TV   9%   4%   4%   4%   4%   4%   4%   4%	Circle the beverage you should drink most often. 100% Juice, Soda, W	ater, Sports Drink, Milk	69%	82%
Watch TV   9%   4%   Play outside   35%   49%   Read a book   18%   11%   11%   13%   11%   13%   14	Circle the cereal that will give you the most energy. (Only nutrition labels shown.)		68%	88%
Watch TV   9%   4%   Play outside   35%   49%   Read a book   18%   11%   11%   13%   11%   13%   14	During your free time which activity are you most likely to do?	Play video games	4%	4%
Play outside   Read a book   18%   11%   11%   11%   11%   13%   11%   12%	Build your free time which act fry are you most mery to do.	•		
Read a book Play a sport   34%   33%   33%   33%   34%   33%   34%   33%   34%   33%   34%   33%   34%   33%   34%   3				
Play a sport   34%   33%     I have energy to play				
Some of the time   14%   13%   Most of the time   29%   41%   42%   42%     I enjoy eating "go" foods   None of the time   26%   22%   Some of the time   26%   22%   Most of the time   26%   22%   41%   42%				
Rost of the time   29%   41%   42%	I have energy to play	None of the time	3%	4%
Part		Some of the time	14%	13%
I enjoy eating "go" foods  None of the time Some of the time All of the time A		Most of the time	29%	41%
Some of the time   26%   22%   Most of the time   26%   42%   42%   All of the time   46%   35%		All of the time	54%	42%
Most of the time All of the All of the time All of the time All of the time All of the All of the time All of the All of	I enjoy eating "go" foods	None of the time	2%	2%
Men you come home from school, which beverage are you most likely to drink?   100% Juice   20%   13%   Soda   3%   9%   Water   56%   70%   Sports Drink   8%   0%   Milk   14%   8%   1 = 2 times/week   12%   12%   3 = 4 times/week   3%   6%   5 = 6 times/week   6%   3%   Everyday   76%   77%   77%   What did you think of the Nurture lessons?   I liked them a lot   Most of them were good   58%   50%   50me of them were good   58%   50%   50%   50me of them were good   50%		Some of the time	26%	22%
When you come home from school, which beverage are you most likely to drink?       100% Juice       20%       13%         Soda       3%       9%         Water       56%       70%         Sports Drink       8%       0%         Milk       14%       8%         I eat breakfast       Never       3%       3%         1 - 2 times/week       12%       12%         3 - 4 times/week       3%       6%         5 - 6 times/week       6%       3%         Everyday       76%       77%         What did you think of the Nurture lessons?       I liked them a lot       53%         Most of them were good       28%         Some of them were good       12%		Most of the time	26%	42%
Soda   3%   9%   Water   56%   70%   Sports Drink   8%   0%   Milk   14%   88%     I eat breakfast   Never   3%   3%   1 - 2 times/week   12%   12%   3 - 4 times/week   3%   6%   5 - 6 times/week   6%   3%   Everyday   76%   77%      What did you think of the Nurture lessons?   I liked them a lot   Most of them were good   28%   Some of them were good   12%		All of the time	46%	35%
Water   56%   70%   Sports Drink   8%   0%   Milk   14%   8%     I eat breakfast   Never   3%   3%   1 - 2 times/week   12%   12%   3 - 4 times/week   3%   6%   5 - 6 times/week   6%   3%   5 - 6 times/week   6%   3%   Everyday   76%   77%    What did you think of the Nurture lessons?   I liked them a lot   Most of them were good   28%   Some of them were good   12%	When you come home from school, which beverage are you most likely to drink?	100% Juice	20%	13%
Sports Drink   8%   0%   Milk   14%   8%	,	Soda	3%	9%
Never   3%   3%     1 eat breakfast   Never   3%   3%     1 - 2 times/week   12%   12%     3 - 4 times/week   3%   6%     5 - 6 times/week   6%   3%     Everyday   76%   77%     What did you think of the Nurture lessons?   I liked them a lot   Most of them were good   28%     Some of them were good   12%		Water	56%	70%
Never   3%   3%   1 - 2 times/week   12%   12%   3 - 4 times/week   3%   6%   5 - 6 times/week   6%   3%   76%   77%		Sports Drink	8%	0%
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		Milk	14%	8%
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	I eat breakfast	Never	3%	3%
		1 - 2  times/week	12%	12%
Everyday 76% 77%  What did you think of the Nurture lessons?  I liked them a lot 53%  Most of them were good 28%  Some of them were good 12%		3 - 4  times/week	3%	6%
What did you think of the Nurture lessons?  I liked them a lot  Most of them were good  Some of them were good  12%		5 - 6  times/week	6%	3%
Most of them were good 28% Some of them were good 12%		Everyday	76%	77%
Most of them were good 28% Some of them were good 12%	What did you think of the Nurture lessons?	I liked them a lot		53%
Some of them were good 12%		Most of them were good		28%
		_		12%
		I didn't like them		7%

<sup>\*</sup>For knowledge questions, the correct answer is underlined, shows % of students choosing this.



- "When we helped the three kids." (Case study on meals, beverages, and movements to help increase energy.)
- "When you are in front of the TV, you don't know what you are putting in your mouth."
- "How to read a cereal box." "When you go to a store, look for a nutritious cereal."
- "You need a good breakfast."
- "Sports drinks have lots of unhealthy ingredients."
- "You do not need to eat a lot of sugar because it is bad for your heart."
- "Spinach in a smoothie is very good and cannot be tasted."
- "I learned how to do different exercises."
- "Learning not to watch too much TV."



#### Fourth Grade - Five Classrooms

The focus areas were

- Whole grains
- Balanced meals
- Sleep
- Exercise

## Average 4th Grade Classroom Teachers' Ratings Showing Greatest Program Impact, May 2012 Scale: 1 = Not at all, 5 = A Great Deal

- 3.60 Overall the Nurture lessons have benefitted my students
- 3.80 Student awareness of nutrition concepts taught in the program has increased
- 4.00 Students are eating more or all of the fruits offered in class
- 3.60 Students are eating a greater variety or all of the fruits offered in class
- 3.80 Students are eating more or all of the vegetables offered in class
- 4.00 Students are eating a greater variety or all of the vegetables offered in class
- 3.67 Students are incorporating lesson concepts into their day to day lives

#### 4th Grade Classroom and P.E. Teachers' Favorite Things about the Elementary Program

- "Nurture lessons are presented in a child-friendly, easy to understand manner. They convey ideas and
  concepts about nutrition and exercise that are essential for children to learn but which are not addressed in
  our curriculum."
- "I like that the kids learn these important concepts."
- "Broader perspective of healthy life choices."
- "Hand-on. Good coordination between the graphics and the manipulatives."
- "The content was interesting."
- "They had fun."



<sup>\*</sup>For knowledge questions, the correct answer is underlined, shows % of students choosing this.



4th Grade October and May Student Assessment Results	Responses*	Oct	May
Circle the beverage you should drink most often. 100% Juice, Soda, Water	<u>r</u> , Sports Drink, Milk	71%	86%
Circle the product that has the most whole grains. (Only 3 ingredients lists provide	ed.)	41%	89%
Circle the item below that is NOT a benefit of eating whole grains.  They pro	ovide long lasting energy	18%	19%
They have more vitamins and file	per that processed grains	25%	13%
They	help build strong bones	15%	11%
	They help you feel full.	43%	57%
Which of the following foods is not a whole grain? Oatmeal, 100% Whole Wheat Brea	d, Brown Rice, <u>Macaroni</u>	78%	87%
How many hours of sleep should most $4^{th}$ graders get? $6-8$ hours, $9-1$	1 hours, 12 – 16 hours	51%	72%
What activity should be avoided one hour before going to bed?			
Reading, <u>Watching TV</u> , Taking a bath, Listen	ing to soft music	60%	75%
During your free time which activity are you most likely to do?	Play video games	15%	9%
, , , ,	Watch TV	4%	6%
	Play outside	32%	36%
	Read a book	22%	14%
	Play a sport	26%	35%
I have energy to play	None of the time	1%	0%
	Some of the time	18%	13%
	Most of the time	43%	47%
	All of the time	38%	40%
When you come home from school, which beverage are you most likely to drink?	100% Juice	18%	11%
	Soda	6%	3%
	Water	57%	69%
	Sports Drink	7%	7%
	Milk	12%	10%
What did you think of the Nurture lessons?	I liked them a lot		42%
	Most of them were good		23%
	Some of them were good		20%
	I didn't like them		15%

- "When we did an activity like looking at the cereal box to find the whole grain."
- "Eating more whole grains can boost energy."
- "When we got to see all the different whole grains."
- "If you have a good lunch, you will have more energy."
- "When we made our own healthy lunch with a partner."
- "Juices can slow you down."
- "I need to drink milk three times a day."
- "Sleep so your mind can relax."
- "What is good for your body will make you feel good."





## Fifth Grade - Four Classrooms

The focus areas were

- Portion control
- Fast food choices
- Understanding advertising messages
- Exercise and stress management



#### Average 5th Grade Classroom Teachers' Ratings Showing Greatest Program Impact, May 2012

(Based on three teachers since the 4th went on maternity leave in late winter.)

## Scale: 1 = Not at all, 5 = A Great Deal

- 3.33 Student awareness of nutrition concepts taught in the program has increased
- 3.00 Students are making correct cause-and-effect linkages between healthy and unhealthy foods and their impact on health.
- 3.50 Students are bringing healthier snacks
- 3.50 Students are bringing healthier lunches
- 4.00 Students are eating more or all of the fruits offered in class
- 4.00 Students are eating a greater variety or all of the fruits offered in class
- 4.00 Students are exercising more at school
- 3.50 Students are exercising more outside school

#### 5th Grade Classroom and P.E. Teachers' Favorite Things about the Elementary Program

- [Regarding a supplemental classroom activity] "I like the math connection this was a great extension. I was able to teach conversions which we haven't gotten to yet, and then add a graphing component for those who wanted a challenge. Nice resource!"
- [I liked] "The connection with other activities taught by classroom and PE teachers."
- "Some of the lessons were interesting."
- "Physical activity, hands-on, visuals."
- "Opportunity to use conversions and ratios; attention to portion; comparison."
- "Love Four Square."





<sup>\*</sup>For knowledge questions, the correct answer is underlined, shows % of students choosing this.



5th Grade October and May Student Assessment Results	Responses*	Oct	May
How do you know if a food has added sugar in it?			
It is impossible to tell, You can only tell by tasting it, Read the ingredient list		91%	89%
There are 3 types of sugar. Match each type of sugar with its description			
Fructose is a "natural" sugar. It is found in fresh fruits and vegetables.		45%	36%
Lactose is found in dairy products such as milk, yogurt, and cheese		66%	85%
Sucrose is "added" sugar. It is found in candy, soda, pastries, and other p	processed foods.	43%	34%
What is the difference between a portion size and a serving size?		42%	69%
A serving size is the amount of food you consume in one sitting such as an entire bowl, whereas a portion size is a set amount of food, such as ½ cup. A serving size is a set amount of food, such as			
1/2 cup, whereas a portion size is the amount of food you consume in one si bowl. There is no difference, they mean the same thing.			
In the last 30 years, portions sizes have: Gotten much smaller, Stayed the same, Gotten much larger		60%	82%
Which of the following is NOT a strategy for controlling portion sizes?		19%	26%
Put your meals on smaller plates or in smaller bowls. Drink a glass of water 20:	minutes before eating.		
Don't eat between meals. Put snacks on a plate instead of eating out of the bag	ŗ.		
During your free time which activity are you most likely to do?	Play video games	13%	20%
	Watch TV	2%	10%
	Play outside	41%	42%
	Read a book	17%	8%
	Play a sport	26%	20%
I have energy to play	None of the time	0%	9%
	Some of the time	8%	13%
	Most of the time	41%	46%
	All of the time	51%	32%
I enjoy eating go foods.	None of the time	4%	2%
	Some of the time	58%	52%
	Most of the time	23%	25%
	All of the time	15%	21%
When you come home from school, which beverage are you most likely to drink?	100% Juice	6%	17%
	Soda	4%	2%
	Water	64%	69%
	Sports Drink	4%	4%
	Milk	22%	9%
What did you think of the Nurture lessons?	I liked them a lot		17%
	Most of them were good		32%
	Some of them were good		38%
	I didn't like them		13%

<sup>\*</sup>For knowledge questions, the correct answer is underlined, shows % of students choosing this.



- "Try to eat more fruits and veggies instead of sweets."
- "I learned how to eat healthy how to relax and how to exercise."
- "My favorite part of the Nurture lessons was the foods from different cultures."
- "How advertisements make you want to eat the food in the advertisements."
- "When we used pasta to show the serving size."
- "Strategies that help you eat less."









<sup>\*</sup>For knowledge questions, the correct answer is underlined, shows % of students choosing this.