Tool: Knowledge, Attitudes, and Consumption Behavior Survey

Thank you for your interest in administering the Knowledge, Attitudes, and Consumption Behavior (“KA”) Survey to your students. It is an 83-item survey designed to assess six areas (attitudes, knowledge, perception/self-efficacy, exposure, liking, and willingness) that part of the typical paradigm used in many nutrition education to improve people’s dietary habits: increase knowledge about, to improve attitudes toward, healthy eating habits. A final section, the fruit/vegetable screener, is a very cursory look at children’s dietary habits, specific to fruit and vegetable consumption. The KA survey can be conducted as a pre/post to evaluate potential changes in any of the areas assessed.

The KA survey is easy to administer. Students should complete the survey at the beginning of the farm to school program (ideally, before any programming happens; alternatively, as early in the school year as possible), and again at the end of the planned program activities (for example, at the end of a defined unit of nutrition education lessons, or at the end of the school year). The information below provides background information on this evaluation tool, including a description of where the tool comes from, a history of its development, and suggestions for administering the survey.

About This Tool

The Wisconsin Farm to School Evaluation (beginning fall 2010) began using a student survey to assess factors believed to predict or influence fruit and vegetable consumption:

- **Attitudes** toward eating fruits and vegetables: fruit/vegetable neophobia, or fear of trying new fruits/vegetables (in various settings, with different/unknown names, if it looks strange, etc.)
- **Knowledge** about nutrition and agricultural concepts
- **Perception/Self-efficacy** for making healthy eating choices
- **Exposure** to a series of specific fruit and vegetable items
- **Liking** of the specific fruits and vegetables students have tasted (as reported in Exposure)
- **Willingness** to try the specific fruits and vegetables (i.e., if they hadn’t previously tried it, or if they had tried it and not liked it).
- **Fruit and Vegetable Screener** – a brief series of questions about what fruit/vegetable items (grouped) students remember eating in the past day, and how much of each.

Scoring procedures are included at the end of this document, following the survey pages, and are generally sums within respective sections. Even in the first survey administration, students’ average construct scores were high. Because of this, the Wisconsin F2S Evaluation Team added additional questions to the Knowledge and to the Exposure/Liking/Willingness sections to improve the survey’s ability to assess change over time.

History of This Tool

The original version comprised a fruit/vegetable neophobia scale which was adapted for use with the University of North Carolina-Chapel Hill Farm to School Evaluation from a validated food neophobia scale; questions from the Wisconsin Fresh Fruit & Vegetable Program evaluation (based on previously validated measures); and questions from the AmeriCorps Farm to School survey (not
The surveys were combined and limited to 60 items. As mentioned above, initial survey construct scores were high, indicating a ceiling effect, so the Evaluation Team pilot-tested additional questions (Knowledge; Exposure/Liking/Willingness) with a small cohort in May 2012. The final group of added questions included (a) two knowledge questions, where most students did not know the answer and where the concepts were easy to include in F2S curricula, (b) two additional fruits, and (c) two additional vegetables. For the added fruit and vegetable items, the Evaluation Team selected items that had potential to be grown locally and where 55% or fewer of students had tasted the item. Additionally, we decided to ask all students for the Willingness construct if they would be willing to try FV items again so that we could capture whether students who previously tasted and disliked an item would be willing to taste again. Finally, in the revised version, we added FV screener questions that originated in the Got Dirt? curriculum evaluation. The FV screener questions were included with the purpose of replacing an additional Food Frequency Questionnaire tool (used only in the 2010-2011 evaluation year), as well as to enhance the Perception/Self-Efficacy construct. The final KA survey is an 83-item survey, which students have completed in a median time of approximately 30 minutes.

**KA Survey Administration**

This tool can be administered in four ways:

<table>
<thead>
<tr>
<th>KA Survey Administration Option</th>
<th>Attitudes</th>
<th>Knowledge</th>
<th>Perception/ Self-efficacy</th>
<th>Exposure</th>
<th>Liking</th>
<th>Willingness</th>
<th>Fruit/ Vegetable Screener</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions</td>
<td>1-20</td>
<td>22-37, 40</td>
<td>37-38; pg 12</td>
<td>41-66 (a)</td>
<td>41-66 (b)</td>
<td>41-66 (c)</td>
<td>page 11</td>
</tr>
<tr>
<td>Complete survey</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Attitudes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FV screener</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

The complete survey, designed for upper-elementary students, has historically taken students approximately 30 minutes to complete when administered via an online platform. The survey has been administered on paper to a limited degree; average time for completion is not available.

The survey, or portions thereof, should be administered during class time with an adult available to assist students as needed. This survey can assess change in the construct sections (see table, above) across the course of F2S program implementation. Ideally, administer it at the start and end of the school year to evaluate the program’s effectiveness in improving scores in the above constructs.

Please also refer to the **KA Survey Scoring Procedure**, which follow the survey in this tool.

A script has been used to introduce this survey in previous evaluations:

“This survey asks what you think about food. The first part of this survey asks what you think about fruits and vegetables, and if you are willing to try new ones. The second part asks questions about where food comes from and how we eat. The third part of the survey asks whether you have ever tried specific fruits and vegetables. The last part of the survey asks if, and how much, you have eaten different types of foods. This survey should take about 30 minutes. If you have questions, ask [whoever is administering the survey].”
Wisconsin Farm to School
Student Survey

Welcome to the Wisconsin Farm to School Student Survey. We want to hear what you think about fruits and vegetables - thank you for helping us!

This is not a test and it will not affect your grades. Please answer every question, telling us what you really think. If you have questions you may ask your teacher or the adult in charge during this survey.

Student Evaluation ID:

Today’s date: _____________
    month / day / year

I am a:  □ Boy      □ Girl

I am in:  □ 3rd grade   □ 4th grade   □ 5th grade

What ethnic group do you belong to?

□ African-American
□ Asian-American
□ Caucasian
□ Hispanic
□ Native American/American Indian
□ Other – please describe: ____________________

When is your birthday?

Month: _____________    Day: _____________
Year (that you were born): _____________
**Please tell how you feel about fruit.**

1. How much do you like fruit?

   - [ ] a lot
   - [ ] a little
   - [ ] not very
   - [ ] much

2. When you try a new fruit for the first time, how much do you usually like it?

   - [ ] a lot
   - [ ] a little
   - [ ] not very
   - [ ] much

3. How much do you like tasting new fruits?

   - [ ] definitely
   - [ ] probably
   - [ ] probably
   - [ ] not
   - [ ] definitely
   - [ ] not

**Please tell how you feel about tasting new fruit.**

4. Will you taste a fruit if you don't know what it is?

   - [ ] definitely
   - [ ] probably
   - [ ] probably
   - [ ] not
   - [ ] definitely
   - [ ] not

5. Will you taste a fruit if it looks strange?

   - [ ] definitely
   - [ ] probably
   - [ ] probably
   - [ ] not
   - [ ] definitely
   - [ ] not

6. Will you taste a fruit if you have never tasted it before?

   - [ ] definitely
   - [ ] probably
   - [ ] probably
   - [ ] not
   - [ ] definitely
   - [ ] not

7. When you are at a friend's house, will you try a new fruit?

   - [ ] definitely
   - [ ] probably
   - [ ] probably
   - [ ] not
   - [ ] definitely
   - [ ] not

8. When you are at school, will you try a new fruit?

   - [ ] definitely
   - [ ] probably
   - [ ] probably
   - [ ] not
   - [ ] definitely
   - [ ] not

9. When you are at home, will you try a new fruit?

   - [ ] definitely
   - [ ] probably
   - [ ] probably
   - [ ] not
   - [ ] definitely
   - [ ] not

10. How many times have you tried a new fruit since school started this year?

    - [ ] Never
    - [ ] 1 time
    - [ ] 2 times
    - [ ] 3 times
    - [ ] at least 4 times
Please tell how you feel about vegetables.

11 How much do you like vegetables? ☐ a lot ☐ a little ☐ not very much ☐ not at all

12 When you try a new vegetable for the first time, how much do you usually like it? ☐ ☐ ☐ ☐

13 How much do you like tasting new vegetables? ☐ ☐ ☐ ☐

Please tell how you feel about tasting new vegetables.

14 Will you taste a vegetable if you don’t know what it is? ☐ ☐ ☐ ☐

15 Will you taste a vegetable if it looks strange? ☐ ☐ ☐ ☐

16 Will you taste a vegetable if you have never tasted it before? ☐ ☐ ☐ ☐

17 When you are at a friend’s house, will you try a new vegetable? ☐ ☐ ☐ ☐

18 When you are at school, will you try a new vegetable? ☐ ☐ ☐ ☐

19 When you are at home, will you try a new vegetable? ☐ ☐ ☐ ☐

20 How many times have you tried a new vegetable since school started this year? ☐ Never ☐ 1 time ☐ 2 times ☐ 3 times ☐ at least 4 times

21. How many times in your life have you been to a farm?
☐ Never ☐ 1 time ☐ 2 times ☐ 3 times ☐ 4 times or more

☐ As plants ☐ As animals ☐ As minerals ☐ Something else

23. What part of a plant is a carrot? Please check one.
☐ Leaf ☐ Root ☐ Stem ☐ Flower
24. Where do eggs come from?  *Please check one.*
   - Cows
   - Goats
   - Chickens
   - Something else

25. What is a benefit of using compost?
   - Compost feeds wild animals.
   - Makes farmers use more chemical fertilizers.
   - Compost keeps food out of landfills.
   - None of the above.

26. Do insects play an important role in growing plants?
   - Yes
   - No
   - I don’t know

27. Do TOMATOES grow in Wisconsin?
   - Yes
   - No
   - I don’t know

28. Do ORANGES grow in Wisconsin?
   - Yes
   - No
   - I don’t know

29. Do APPLES grow in Wisconsin?
   - Yes
   - No
   - I don’t know

30. Does SQUASH grow in Wisconsin?
   - Yes
   - No
   - I don’t know

31. Do BANANAS grow in Wisconsin?
   - Yes
   - No
   - I don’t know
32. Imagine a meal with a hotdog in a bun and a glass of milk. What food group is missing? Please check one.
- Dairy
- Fruits & Vegetables
- Meat
- Grains

33. What food group does the pear belong to? Please check one.
- Dairy
- Fruits & Vegetables
- Meat
- Grains

34. Fruits and vegetables that are high in Vitamin A are ________ in color.
- Red and white
- Blue and light brown
- Yellow-orange and dark green
- Brown and purple
- I don’t know

35. Why do I need to eat food?
- I need food for energy and to grow.
- I need food ONLY because it tastes good.
- I don’t need food.
- I don’t know

36. Why do I need to eat different kinds of foods?
- I can get a lot of the SAME nutrients.
- I can get many DIFFERENT nutrients.
- I don’t need to eat different kinds of food.
- I don’t know.

37. Healthy eating is:
- eating fruits but not vegetables.
- not eating fruits or vegetables.
- eating both fruits and vegetables.
- I don’t know.

38. The foods that I eat for meals and snacks are healthy. (Choose one.)
- Yes, all of the time
- Yes, sometimes
- No
39. How likely are you to eat fresh fruit instead of candy? (Choose one.)

- Not likely
- Likely
- Very Likely

40. Which of these is the HEALTHIEST way to eat potatoes?

- Potato salad
- French fries
- Baked potato
- I don’t know

For the remaining questions, please answer all parts of each question.

41. Have you ever eaten an apple?

- Yes
  Did you like it?  yes  no
- No
  Would you try one?
    yes
    no
    maybe

42. Have you ever eaten an orange?

- Yes
  Did you like it?  yes  no
- No
  Would you try one?
    yes
    no
    maybe

43. Have you ever eaten a mango?

- Yes
  Did you like it?  yes  no
- No
  Would you try one?
    yes
    no
    maybe

44. Have you ever eaten watermelon?

- Yes
  Did you like it?  yes  no
- No
  Would you try one?
    yes
    no
    maybe
45. Have you ever eaten a pear?

☐ Yes Did you like it? ☐ yes ☐ no
☐ No Would you try one?
☐ yes
☐ no
☐ maybe

46. Have you ever eaten a kiwi?

☐ Yes Did you like it? ☐ yes ☐ no
☐ No Would you try one?
☐ yes
☐ no
☐ maybe

47. Have you ever eaten a strawberry?

☐ Yes Did you like it? ☐ yes ☐ no
☐ No Would you try one?
☐ yes
☐ no
☐ maybe

48. Have you ever eaten a blueberry?

☐ Yes Did you like it? ☐ yes ☐ no
☐ No Would you try one?
☐ yes
☐ no
☐ maybe

49. Have you ever eaten cantaloupe?

☐ Yes Did you like it? ☐ yes ☐ no
☐ No Would you try one?
☐ yes
☐ no
☐ maybe

50. Have you ever eaten a grape?

☐ Yes Did you like it? ☐ yes ☐ no
☐ No Would you try one?
☐ yes
☐ no
☐ maybe
51. Have you ever eaten papaya?

☐ Yes  Did you like it?  ☐ yes  ☐ no
☐ No  Would you try it?
  ☐ yes
  ☐ no
  ☐ maybe

52. Have you ever eaten a cranberry?

☐ Yes  Did you like it?  ☐ yes  ☐ no
☐ No  Would you try one?
  ☐ yes
  ☐ no
  ☐ maybe

53. Have you ever eaten asparagus?

☐ Yes  Did you like it?  ☐ yes  ☐ no
☐ No  Would you try one?
  ☐ yes
  ☐ no
  ☐ maybe

54. Have you ever eaten broccoli?

☐ Yes  Did you like it?  ☐ yes  ☐ no
☐ No  Would you try one?
  ☐ yes
  ☐ no
  ☐ maybe

55. Have you ever eaten beets?

☐ Yes  Did you like it?  ☐ yes  ☐ no
☐ No  Would you try one?
  ☐ yes
  ☐ no
  ☐ maybe

56. Have you ever eaten a cucumber?

☐ Yes  Did you like it?  ☐ yes  ☐ no
☐ No  Would you try one?
  ☐ yes
  ☐ no
  ☐ maybe
57. Have you ever eaten a green pepper?

☐ Yes  Did you like it?  ☐ yes     ☐ no
☐ No   Would you try one?
    ☐ yes
    ☐ no
    ☐ maybe

58. Have you ever eaten a sweet potato?

☐ Yes  Did you like it?  ☐ yes     ☐ no
☐ No   Would you try one?
    ☐ yes
    ☐ no
    ☐ maybe

59. Have you ever eaten peas?

☐ Yes  Did you like them?  ☐ yes     ☐ no
☐ No   Would you try them?
    ☐ yes
    ☐ no
    ☐ maybe

60. Have you ever eaten eggplant?

☐ Yes  Did you like it?  ☐ yes     ☐ no
☐ No   Would you try it?
    ☐ yes
    ☐ no
    ☐ maybe

61. Have you ever eaten spinach?

☐ Yes  Did you like it?  ☐ yes     ☐ no
☐ No   Would you try it?
    ☐ yes
    ☐ no
    ☐ maybe

62. Have you ever eaten green beans?

☐ Yes  Did you like it?  ☐ yes     ☐ no
☐ No   Would you try one?
    ☐ yes
    ☐ no
    ☐ maybe
63. Have you ever eaten avocado?
☐ Yes  Did you like it? ☐ yes  ☐ no
☐ No  Would you try one?
☐ yes
☐ no
☐ maybe

64. Have you ever eaten a tomato?
☐ Yes  Did you like it? ☐ yes  ☐ no
☐ No  Would you try one?
☐ yes
☐ no
☐ maybe

65. Have you ever eaten a carrot?
☐ Yes  Did you like it? ☐ yes  ☐ no
☐ No  Would you try one?
☐ yes
☐ no
☐ maybe

66. Have you ever eaten a radish?
☐ Yes  Did you like it? ☐ yes  ☐ no
☐ No  Would you try one?
☐ yes
☐ no
☐ maybe
Think about everything you ate or drank yesterday. Remember what you had for breakfast, lunch, dinner, after school, while watching TV, and at bedtime.

<table>
<thead>
<tr>
<th>Number</th>
<th>Food Item</th>
<th>Did you eat or drink it yesterday?</th>
<th>How much did you eat?</th>
</tr>
</thead>
<tbody>
<tr>
<td>67</td>
<td>Apples, bananas, or oranges</td>
<td>□ Yes □ No</td>
<td>□ ½ □ 1 □ 2</td>
</tr>
<tr>
<td>68</td>
<td>Applesauce, fruit cocktail</td>
<td>□ Yes □ No</td>
<td>□ A little □ Some □ A lot</td>
</tr>
<tr>
<td>69</td>
<td>Any other fruit, like strawberries, grapes</td>
<td>□ Yes □ No</td>
<td>□ A little □ Some □ A lot</td>
</tr>
<tr>
<td>70</td>
<td>French fries, hash browns, tater tots</td>
<td>□ Yes □ No</td>
<td>□ A little □ Some □ A lot</td>
</tr>
<tr>
<td>71</td>
<td>Other potatoes, like mashed or boiled</td>
<td>□ Yes □ No</td>
<td>□ A little □ Some □ A lot</td>
</tr>
<tr>
<td>72</td>
<td>Ketchup or salsa</td>
<td>□ Yes □ No</td>
<td>□ A little □ Some □ A lot</td>
</tr>
<tr>
<td>73</td>
<td>Lettuce salad</td>
<td>□ Yes □ No</td>
<td>□ A little □ Some □ A lot</td>
</tr>
<tr>
<td>74</td>
<td>Tomatoes, including on salad</td>
<td>□ Yes □ No</td>
<td>□ ¼ tomato □ ½ tomato □ 1 tomato</td>
</tr>
<tr>
<td>75</td>
<td>Green beans or peas</td>
<td>□ Yes □ No</td>
<td>□ A little □ Some □ A lot</td>
</tr>
<tr>
<td>76</td>
<td>Other vegetables, like corn, carrots, greens, broccoli</td>
<td>□ Yes □ No</td>
<td>□ A little □ Some □ A lot</td>
</tr>
<tr>
<td>77</td>
<td>Vegetable soup, tomato soup, any soup or stew with vegetables in it</td>
<td>□ Yes □ No</td>
<td>□ A little □ Some □ A lot</td>
</tr>
<tr>
<td>78</td>
<td>Chili beans, pinto beans, black beans, including in burritos</td>
<td>□ Yes □ No</td>
<td>□ A little □ Some □ A lot</td>
</tr>
<tr>
<td>79</td>
<td>Refried beans</td>
<td>□ Yes □ No</td>
<td>□ A little □ Some □ A lot</td>
</tr>
</tbody>
</table>
How sure are you that you can do the following:

80. Eat vegetables at dinner.
   - I know I can
   - I think I can
   - I’m not sure I can
   - I know I can’t

81. Eat my favorite fruit instead of my usual desert with dinner.
   - I know I can
   - I think I can
   - I’m not sure I can
   - I know I can’t

82. Eat a vegetable that’s being served with my lunch at school.
   - I know I can
   - I think I can
   - I’m not sure I can
   - I know I can’t

83. Eat a fruit that’s being served with my lunch at school.
   - I know I can
   - I think I can
   - I’m not sure I can
   - I know I can’t

Thank you for taking the time to complete this survey!
Knowledge and Attitudes Survey Scoring Procedure

Updated December 18, 2013

The scoring procedures described here apply to both pre- and post-test administration scoring. To evaluate pre/post change, calculate the difference in construct scores by subtracting the pre-test score from the post-test score (each section separately).

Scoring procedure

Students’ responses from the KA survey were categorized into different scores.

1) Knowledge: There are seventeen questions in this section. The questions focus on material typically covered in farm to school programs. Score the questions accordingly:
   • Correct responses = score 1
   • Incorrect answers = score 0 (including the response *I don’t know*, when that is a response option)

Scores can range from 0 to maximum of 17. To determine a student’s Knowledge score, add the sum of all questions in this section (Q22-37, Q40).

   \[ \text{Knowledge} = \sum (\text{correct responses}, Q22 - 37, Q40) \]

2) Attitudes: There are twenty questions in this section. Six questions (Q1-3, Q11-13) ask how much a student likes F/V and how much a student likes *new* F/V. Score the responses as:

<table>
<thead>
<tr>
<th></th>
<th>a lot</th>
<th>a little</th>
<th>not very much</th>
<th>not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Twelve questions (Q4-9, Q14-19) ask students’ willingness to try a F/V in a variety of situations. Score responses as:

<table>
<thead>
<tr>
<th></th>
<th>definitely</th>
<th>probably</th>
<th>probably not</th>
<th>definitely not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Finally, two questions (Q10, Q20) ask how many times a student had tried a new F/V since the start of the school year. Score responses as:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>1 time</th>
<th>2 times</th>
<th>3 times</th>
<th>At least 4 times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Scores can range from 20 to a maximum of 82. To determine a student’s Attitudes score, add the sum of all the questions in this section (Q1-20).

   \[ \text{Attitudes} = \sum (\text{scored responses}, Q1 - 20) \]

3) Perception/Self-efficacy: There are six questions in this section. Two questions (Q38-39) ask students’ perception of their own diets – whether the foods they eat are healthy. Score responses as:

<table>
<thead>
<tr>
<th></th>
<th>Q38</th>
<th>Q39</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes, all the time</td>
<td>Yes, sometimes</td>
<td>no</td>
</tr>
<tr>
<td></td>
<td>Very likely</td>
<td>Likely</td>
<td>Not likely</td>
</tr>
</tbody>
</table>

Score responses as:

Four additional questions (Q80-83) ask students to reflect on their ability to make healthy choices: eat vegetables at dinner; eat fruit instead of dessert at dinner; eat a vegetable being served at school lunch; and eat a fruit being served at school lunch. Score responses as:
Scores can range from 4 to a maximum of 20. To determine a student’s Perception/Self-Efficacy score, add the sum of all the questions in this section (Q38-39, Q80-83).

\[ \text{Perception/self efficacy} = \sum(\text{scored responses}, Q38 - 39, Q80 - 83) \]

4) **Exposure:** There are 26 questions in this section (Q41-66, parts a). Each question asks if a student has tried a particular fruit or vegetable. Each question includes a photograph to aid with food recognition. Score responses as:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Scores can range from 0 to a maximum of 26. To determine a student’s Exposure score, add the sum of all the questions in this section (Q41-66, parts a).

\[ \text{Exposure} = \sum(\text{yes responses}, Q41 - 66, \text{parts a}) \]

The student’s response to the Exposure question branches to either a Liking (response yes) or Willingness (response no) follow-up question for each F/V.

5) **Liking:** (Q41-66, parts b) Where students answered “yes” to part a (above), students are asked whether they liked the fruit/vegetable item that they reported tasting. Score responses as:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

To determine a student’s Liking score, divide the sum of the responses for the questions in this section (Q41-66, parts b) by the student’s Exposure score (= the total number of fruits/vegetables the student tried); finally, express it as a percentage by multiplying by 100.

\[ \text{Liking} = \frac{\sum(\text{yes responses}, Q41 - 66, \text{parts b})}{\text{Exposure score}} \times 100 \]

Scores can range from 0 to a maximum of 100.

6) **Willingness:** *See footnote for old scoring.*

New scoring (as of May 2013) involved asking all students whether they would try the 26 specific F/V (Q41-66, parts c).

<table>
<thead>
<tr>
<th>Yes</th>
<th>Maybe</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

To determine a student’s Willingness score, add the sum of all the questions in this section (Q41-66, parts c) and divide by 2. Scores can range from 0 to a maximum of 26.

\[ \text{Willingness} = \frac{\sum(\text{scored responses}, Q41 - 66, \text{parts c})}{2} \]

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1 Old scoring: Among the previously not-tasted F/V, students were asked whether they would try it (yes, score=2, maybe, score=1, no, score=0). Additionally, for each F/V students reported trying and liking, they received a score of 2 (because it was assumed that they would try a F/V they had previously tried and liked). The collective sum of all responses was divided by two. Scores can range from 0 to 20.
7) **FV Screener:** There are 13 questions in this section (Q67-69). For a variety of groups of fruit or vegetable items, students are asked to report (a) whether they ate the item(s) in the past day, and (b) if so, how much (a relative amount). Score section (a) responses as:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Section (b) response scoring strategies are included within each subsection below. The Evaluation Team suggests scoring and assessing the information from this FV screener as follows:

- Calculate the percent of students who report having eating *any* food from the subsections (each separately). For example, 85% of students reported eating any fruit in pre-test, and 100% of students reported eating any fruit at post-test; or 25% of students reported eating any legumes in the pre-test, and 30% of students reported eating any legumes in the post-test.) *Compare the percent of students with a subsection total score greater than 0 to the percent of students with a subsection total score of exactly 0.*

- For each subsection, calculate the average relative amount students reported consuming and relate it back to the terms used for that subsection.

**FV Screener Subsections:**

a. **Fruit (Q67-69)**
   i. Ate fruit at all = score > 0, parts a
   ii. Relative amount: Score responses as:

<table>
<thead>
<tr>
<th>Response</th>
<th>“½”</th>
<th>“1”</th>
<th>“2”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q67</td>
<td>0.5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Q68-69</td>
<td>0.5</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

   To determine a student’s relative consumption of fruits, add the responses in this subsection and divide by 3.

b. **Potatoes (Q70-71):**
   i. Ate potatoes at all = score > 0, parts a
   ii. Relative amount: Score responses as:

<table>
<thead>
<tr>
<th>Response</th>
<th>“A little”</th>
<th>“Some”</th>
<th>“A lot”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q70-71</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

   To determine a student’s relative consumption of fruits, add the responses in this subsection and divide by 2.

c. **Vegetables (non-potato; Q72-77):**
   i. Ate vegetables at all = score> 0, parts a
   ii. Relative amount: Score responses as:

<table>
<thead>
<tr>
<th>Response</th>
<th>“A little”</th>
<th>“Some”</th>
<th>“A lot”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q72-73, 75-77</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Q74</td>
<td>0.25</td>
<td>0.5</td>
<td>1</td>
</tr>
</tbody>
</table>

   To determine a student’s relative consumption of fruits, add the responses in this subsection and divide by 5.
d. **Legumes:**
   i. Ate legumes at all = score > 0, parts a
   ii. Relative amount: Score responses as:

<table>
<thead>
<tr>
<th>Response</th>
<th>“A little”</th>
<th>“Some”</th>
<th>“A lot”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q78-79</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

To determine a student’s relative consumption of fruits, add the responses in this subsection and divide by 2.

**References**


