I love when they ask me for fruit or veggies, especially if they consider that a dessert: Examining parent-child communication about fruits and vegetables.

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Funding statement

Pick a better snack™ is funded by USDA’s Supplemental Nutrition Assistance Program (SNAP). Funding is provided to the Iowa Department of Public Health to deliver Pick a better snack™ through a federal SNAP-Ed grant managed by the Iowa Department of Human Services.
Pick a better snack™

School-based nutrition education program

- Encourage fruits and vegetables as snacks
- In-class lessons
- Elementary school children (K-3)
- 185% FLP
Intervention components

- Kids asking
- I tried it, Sticker
- Bingo Card
- Newsletter
- Classroom Teacher
- PABS media

Food Community Environment

Mediators

- Increase knowledge/skills
- Change in attitudes
- Change in perception of what kid will eat
- Change in self-efficacy (buying/serving)

Parent & child communicate

Buy, Serve and Offer F & V

Socio-economics and Demographics
Purpose of evaluation

1. Does parent/caregiver-child communication work?
   - Do children ask parents/caregivers to purchase fruits and vegetables that were tasted during nutrition education?

2. To what extent do children participate in the grocery shopping process?

3. Given their limited budget, where do parents view fruits and vegetables on the hierarchy of their family food needs?
Methods

Telephone survey
  ◦ Sample drawn from Medicaid data (n = 311)

Interviews
  ◦ Parents from telephone survey agreed to participate in in-depth interview (n = 30)
Telephone survey results (n=311)
Who did we talk to?

Is your child of Spanish or Hispanic or Latino origin? (n = 309)

<table>
<thead>
<tr>
<th>Child of Spanish or Hispanic/Latino Origin</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>61</td>
<td>19.6</td>
</tr>
<tr>
<td>No</td>
<td>248</td>
<td>79.7</td>
</tr>
</tbody>
</table>

What is your child’s race? Select all that apply. (n = 309)

<table>
<thead>
<tr>
<th>Race</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaska Native</td>
<td>6</td>
<td>1.9</td>
</tr>
<tr>
<td>Asian</td>
<td>5</td>
<td>1.6</td>
</tr>
<tr>
<td>Black or African-American</td>
<td>96</td>
<td>31.1</td>
</tr>
<tr>
<td>White</td>
<td>198</td>
<td>64.1</td>
</tr>
<tr>
<td>Other</td>
<td>48</td>
<td>15.4</td>
</tr>
</tbody>
</table>
Do you or any of the members of your household participate in any of the following programs? Select all that apply. (n = 311)

<table>
<thead>
<tr>
<th>Program</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIC</td>
<td>95</td>
<td>32.0</td>
</tr>
<tr>
<td>EBT</td>
<td>232</td>
<td>78.1</td>
</tr>
<tr>
<td>Free/reduced school meals</td>
<td>286</td>
<td>96.3</td>
</tr>
<tr>
<td>Food pantry</td>
<td>76</td>
<td>25.6</td>
</tr>
<tr>
<td>Operation Backpack</td>
<td>70</td>
<td>23.6</td>
</tr>
<tr>
<td>Other food assistance</td>
<td>9</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Number of program a family participates in

<table>
<thead>
<tr>
<th>Number of Respondents</th>
<th>Did not participate in any program</th>
<th>1 program</th>
<th>2 programs</th>
<th>3 programs</th>
<th>4 programs</th>
<th>5 programs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11</td>
<td>38</td>
<td>103</td>
<td>84</td>
<td>44</td>
<td>12</td>
</tr>
</tbody>
</table>
Does parent-child communication work?

Can you remember a time when your child has asked for a fruit or vegetable? (n = 307)

Yes!: 92%

Do you recall how long ago that was? (n = 278)

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the last week</td>
<td>86.0</td>
</tr>
<tr>
<td>In the last month</td>
<td>10.4</td>
</tr>
<tr>
<td>In the last 3 months</td>
<td>2.90</td>
</tr>
<tr>
<td>In the last 6 months</td>
<td>0.40</td>
</tr>
<tr>
<td>Longer than 6 months ago</td>
<td>0.40</td>
</tr>
</tbody>
</table>
When is your child likely to ask for fruits & vegetables? (n = 311)

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the grocery store</td>
<td>90.8</td>
</tr>
<tr>
<td>For snacks</td>
<td>89.5</td>
</tr>
<tr>
<td>For dinner</td>
<td>78.8</td>
</tr>
<tr>
<td>At home, but not connected to a snack or meal</td>
<td>78.4</td>
</tr>
<tr>
<td>For lunch</td>
<td>77.5</td>
</tr>
<tr>
<td>Outside the home</td>
<td>77.5</td>
</tr>
<tr>
<td>At a restaurant other than a fast food place</td>
<td>66.7</td>
</tr>
<tr>
<td>For breakfast</td>
<td>51.3</td>
</tr>
<tr>
<td>At a fast food place</td>
<td>40.2</td>
</tr>
<tr>
<td>At a convenience store</td>
<td>33.7</td>
</tr>
<tr>
<td>Other (please describe)</td>
<td>24.5</td>
</tr>
</tbody>
</table>
What kind of things does your child typically ask for at the store? (Open-ended)

- **Fruit**: 124
- **Chips/crackers/snack foods**: 53
- **Candy & dessert foods**: 40
- **Vegetables**: 37
- **Grains**: 30
- **Dairy**: 23
- **Frozen/pre-made meals**: 19
- **Pop & juice**: 18
- **Other**: 15
- **Meat**: 5
In general, how does it make you feel when your child asks for fruits & vegetables? (n = 148)

- **Positive**: 91%
- **Neutral/indifferent**: 8%
- **Negative**: 1%
Parents can’t always say yes to everything their children want. What are some of the reasons that make you have to say no to a request for fruits or vegetables?

(Open-ended) (n = 307)
Barriers to buying, preparing, & consuming fruits

Agree or strongly agree

- I am not in the habit of eating them.
- I cannot get them easily when I eat out.
- I don't have time to prepare them.
- They cost too much.
- I don't think that eating more of them will make me...
- I eat alone so I don't fix enough of them.
- My family will not eat them.
- They spoil before my family and I can eat them.
- I don't know how to use them in dishes I commonly...
- I would have to travel some distance to find fruits.
- Fresh fruits are hard to buy in my community.
- Fresh fruits are not available at my grocery store.
Barriers to buying, preparing, & consuming vegetables

Agree or strongly agree

- I am not in the habit of eating them.
- I cannot get them easily when I eat out.
- I don't have time to prepare them.
- They cost too much.
- I don't think that eating more of them will make...
- I eat alone so I don't fix enough of them.
- My family will not eat them.
- They spoil before my family and I can eat them.
- I don't know how to use them in dishes I commonly...
- I would have to travel some distance to find...
- Fresh vegetables are hard to buy in my community.
- Fresh vegetables are not available at my grocery...
How often does your child go grocery shopping with you or another adult in your household? (n = 311)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majority of the time</td>
<td>41.2</td>
</tr>
<tr>
<td>Some of the time</td>
<td>30.5</td>
</tr>
<tr>
<td>Every time</td>
<td>20.6</td>
</tr>
<tr>
<td>Rarely</td>
<td>7.4</td>
</tr>
<tr>
<td>Never</td>
<td>0.3</td>
</tr>
</tbody>
</table>
In-depth interviews (n = 30)
Who were these people?

Race and ethnicity
- White 19 (63.3%)
- Black/African American 10 (33.3%)
- Other 3 (10.0%)
- Asian 1 (3.3%)
- Hispanic/Latino 6 (20.0%)

All participated in free/reduced school meals

EBT 17

Operation Backpack 10

WIC 8

Food pantry 8
Asking

• Kids ask about food a lot!!!
• Some of the asking is about fruits and vegetables.
• These are usually positive conversations!
• Fruits and vegetables come up during the school year more than summer.
Parents’ response to asking...

Asking makes parents feel good!

◦ *I love when they ask me for fruit or veggies, especially if they consider that a dessert.*

◦ *It makes me feel better that she’s asking for fruit instead of candy...*

◦ *It makes me feel really good that they can ask and, you know, let me know that they’re hungry without, you know, going in just grabbing anything, getting into junk food all the time.*

◦ *I’m more likely to say yes to healthier foods. So yeah, I prefer it when they ask for those things.*
Parents’ response to asking...

Being able to YES, instead of NO is great!

Sometimes you have to say ‘no’
  ◦ Cost (cherries, mangos, ...)
  ◦ Concerns about spoiling or waste
  ◦ Does the child really like it?

A ‘no’ doesn’t mean ‘never’ or ‘nothing’
  ◦ Sharing
  ◦ Substitution
  ◦ Later (on sale or in season)
Cost

Parents & child very aware of budget constraints!
◦ Kids know the drill
◦ Parents have a plan for responding

There are some feelings of guilt.
To what extent do children participate in the grocery shopping process?

Kids are highly engaged – from list creating, determining what should be purchased and prepared, going shopping, retrieving items

Most kids do go shopping with their families

Parents & kids use this time as a time to talk about fruits and vegetables

Kids ask for things….

- Parents have different strategies for dealing with this, but most say no---unless it is a FV they can afford
Given their limited budget, where do parents view fruits and vegetables on the hierarchy of their family food needs?

Cost is a barrier

- Perception is that (fresh) fruits and vegetables are EXPENSIVE

FV often are a lower priority than:

- Meat (ground)
- Dairy
- Items used to stretch food (e.g., grains, pastas, rice)
- What everyone will eat it & what will last longest
Purpose of evaluation

1. Does parent/caregiver-child communication work?
   - Do children ask parents/caregivers to purchase fruits and vegetables that were tasted during nutrition education?

2. To what extent do children participate in the grocery shopping process?

3. Given their limited budget, where do parents view fruits and vegetables on the hierarchy of their family food needs?
Implications for nutrition programs

Reinforcing child asking for FV

- Programs can provide guidance on appropriate times, places, and ways to ‘ask’
  - Build self-efficacy and confidence around asking for FV
  - Discourage whining or persistent asking
  - Encourage children to ask when parents are making grocery lists, planning meals or at the store
  - What can be done to support asking in stores?

Remind children that their parents may feel proud when their child asks for FV instead of junk food!
Implications for nutrition programs

Addressing perceptions around cost

- Parents see fresh FV as too costly— but canned or frozen FV are not as healthy as fresh
- Nutrition educators should focus on cost-saving mechanisms
  - More education about frozen and canned FV
  - Use of seasonal produce
Implications for nutrition programs

Synergy among nutrition programs

- PABS parents reported participation in multiple food assistance programs
  - Free/reduced school meals, EBT, WIC, food pantries, Operation Backpack
- Work to reinforce messages and educational topics across programs
- Working with Fresh Fruit and Vegetable Program
- Summer slide- who can pick that up?
Conclusion