APA Update: A Focus on School Food

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American Pulse Association
Why focus on schools?

- Cultivate customers for life
- Potential for multi-faceted exposure to beans
- Potential to engage entire school community
Imagine…

~ 55 million K-12 students enrolled in the 2011-12 school year

If each ate one additional ½ cup serving of pulses each week,

Domestic demand ↑ 418 million pounds!
Today’s Update

1. Pulse School Food Pilot Initiative
2. APA Research Fund: Focus on School Food
3. APA-led Research Projects
4. Some Preliminary Results
A Pilot Program: Using Pulses to Increase School Food Nutrition & Economics
## Doing the math: White, brown or beans?

Data from the USDA National Nutrient Database

Bold text ≥ 10% DV

Highlighted boxes ≥ 20% DV ("Excellent Source")

<table>
<thead>
<tr>
<th>1 serving = 1/2 cup or 1 slice</th>
<th>Pinto Beans</th>
<th>Lentils</th>
<th>White Rice</th>
<th>Brown Rice</th>
<th>White Bread</th>
<th>Whole Wheat Bread</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kcals</td>
<td>116</td>
<td>115</td>
<td>103</td>
<td>109</td>
<td>67</td>
<td>62</td>
</tr>
<tr>
<td>Fat (g)</td>
<td>&lt; 0.5</td>
<td>&lt; 0.5</td>
<td>&lt; 0.5</td>
<td>0.8</td>
<td>0.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Protein (g)</td>
<td>7.0</td>
<td>8.9</td>
<td>2.1</td>
<td>2.6</td>
<td>2.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Carbohydrates (g)</td>
<td>22</td>
<td>20</td>
<td>22</td>
<td>22</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Fiber (g)</td>
<td><strong>7.3</strong></td>
<td><strong>7.8</strong></td>
<td>0.3</td>
<td>1.8</td>
<td>0.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Potassium (mg)</td>
<td>398</td>
<td>365</td>
<td>28</td>
<td>42</td>
<td>30</td>
<td>63</td>
</tr>
<tr>
<td>Iron (mg)</td>
<td><strong>2.2</strong></td>
<td><strong>3.3</strong></td>
<td>1.0</td>
<td>0.4</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Magnesium (mg)</td>
<td>43</td>
<td>36</td>
<td><strong>9</strong></td>
<td><strong>42</strong></td>
<td><strong>7</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>
Proposal for a Pulse School Food Pilot Program
2012 Farm Bill Nutrition Title: $10 Million

- Aimed at highest “free & reduced eligible” schools
- Schools most likely to serve processed, pre-made foods:
  - Are in large, urban school districts
  - Have larger proportions free/reduced-eligible students
  - Use “heat & serve” model with no on-site cooking or central kitchen
  - Less likely to meet IOM nutrient recommendations for school meals

24-hour Mean Daily Intake
Among NSLP Participants (SY 2004-5)

% of AI met in a 24-h period

- Fiber
- Potassium
- Sodium

APA Research Fund: 4 Focus Areas

1. Publication of Research Reviews
2. Pulse Researcher Travel Fund
3. Competitive Research Fund
4. School Food Research Project
APA Research Fund:
4 Focus Areas

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APA’s Competitive Research Fund

• Selection of projects in process:
  1. Development of a coordinated school garden and nutrition STEM-based education program to increase the utilization and consumption of pulse crops in school meals
  2. Increasing acceptance and consumption of pulses by school-aged children: A pilot investigation
APA’s National School Food Project

• Focus on 10 states – national “snapshot”

• Provide critical data to industry members & legislators, public health advocates, etc.

• Quantify & describe current pulse usage in schools
APA’s National School Food Project

Research questions:
1. What proportion of vegetable purchases are pulse crops, including specific bean types?
2. Used as veg or meat alternate?
3. How are they prepared? Served?
4. Are there regional differences in usage/preparation?
5. Estimate effects on budget with ↑ usage
Is getting pulses into schools easy???

**APA’s School Food Research Projects**

1. Statewide Availability of Pulse Crops in the USDA Foods Program

2. Frequency and Manner of Usage of Pulse Crops in Michigan School Meals

3. The Feasibility of Increased Utilization of Pulse Crops in School Meals
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**APA’s School Food Research Projects**

1. Statewide Availability of Pulse Crops in the USDA Foods Program

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WA School Nutrition Association

- 3 1-hour workshops held in October 2012
- ~ 50 attendees each
- Survey (n=141), Focus Groups
How often do you use the following food preparation styles in your food service operation?
Are you asking for locally grown or processed foods?

Yes: 35%
No: 16%
Don't know: 49%
Does your district offer nutrition education to compliment service of new foods/menu items?
Logistic challenges in purchasing pulse foods?

- 26% Lack of facilities to handle/prepare
- 18% Lack of storage space
- 31% Lack of equipment to prepare
- 67% Lack of labor to prepare
- 59% Staff lacks training
Barriers faced in serving pulse foods?

40% Don’t know how to prepare
76% Lack of suitable recipes
21% Product is not convenient to use
43% Lack of heat & serve ready product
61% Lack of demand
Select Focus Group Comments

1. Served most frequently:
   - Chickpeas, kidney beans straight from can on salad bar
   - Hummus as dip for vegetables (CONDIMENT)
   - 3-bean salad (canned) on salad bar
   - Black bean & corn salsa (CONDIMENT!)
Select Focus Group Comments

2. What they would like to have:
   - Cryovac bags from USDA Foods
   - Spice packs to mix with canned product
   - Staff training / educational materials
   - Nutrition educational materials, posters
What we learned

1. Districts use Heat & Serve most frequently, but 76% cited lack of recipes as an impediment.

2. Most pulses are served cold, on salad bars, or as condiments (NOT as full ½ c. serving).

3. Opportunities exist for education, staff training, promotional materials.
Next Steps…

1. Collect data from national sample

2. School food product R&D – who will produce / distribute on a LARGE scale???

3. Develop co-ordinated educational outreach program for both service staff & kids

4. Address perceived impediments to service of pulses
We’ve come a long way, but there’s so much more to come!
Thank you!

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