SCHOOL VENDING MACHINES AND CHILDREN’S HEALTH IN LOUISIANA

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Baton Rouge, LA
Presentation Outline

- What does vending have to do with weight status of children?
- Background on vending laws in the US
- Origin of the school vending law in Louisiana
- Submission process for vending
- Issues regarding submissions
- Vending machines versus concession sales
- Current status of the approved vending list
“Childhood obesity is at epidemic levels in the United States.”

- David Satcher
US Surgeon General
Causes of Adolescent Obesity: The Obesogenic Environment

Sports & Leisure
- Lack of school facilities
- Few local playing areas
- Widely available indoor passive entertainment
- Unsafe streets
- Few cycle routes

Family
- Genetic predisposition
- Excess weight in parents
- Breast-feeding practices
- Parents’ health knowledge, budgeting, shopping, & cooking skills

High energy foods promoted via
- Advertising
- “Super-sizing”
- School-based marketing
- Snacks, soft drinks
- Sponsorship
- Eating out

Education & Information
- Lack of School lessons – lifestyle, nutrition, cooking
- Cultural beliefs

Source: Adapted from IOTF Obesity in Europe report
Preventing and Addressing Obesity in Children and Adolescents

- Promote an active lifestyle
- Promote the intake of fruits and vegetables
- Restrict the intake of energy-dense, micronutrient-poor foods such as packaged snacks
- Restrict the intake of sugar-sweetened soft drinks
Preventing and Addressing Obesity in Children and Adolescents

- Limit the exposure of young children to heavy marketing of energy-dense, micronutrient-poor foods

- Provide the necessary information and skills to make healthy food choices
What can we do?

- Modify the environment to:
  - enhance physical activity in schools and communities
  - address the food environment in school (e.g., vending machines)
The Problem Foods

- Chips and french fries make up one-third of teenagers' vegetable intake.
- 31% of American 15 year-olds' eat french fries every day.

http://www.cnn.com/HEALTH/9909/05/chips.fries.ap/index.html
The Problem Foods

- Soda accounts for 8% of the total calorie intake of today’s children.
- 25% of kids drink more than 26 ounces per day (> 300 calories)

JADA 1999;99:436-441
Other Problem Foods

- Other Sneaky Sources of Calories and Fat
  - Vending Machines
    - These contain snacks with high Calories, high fat, and/or a high sugar content.
    - Sodas are very high in sugar and offer very little benefits. Instead, choose water, juice, or a diet soft drink.
Good Vending Choices in Sizes that Limit Calories

- Fresh Fruit
- Fruit Juice, 100%
- Baked Chips
- Lower Fat Chips, Crackers and Cookies in 100 Calorie packs
- Nutri-Grain bars
- Animal Crackers, low fat
- Unsalted or Lightly Salted Peanuts
- Sunflower Seeds
Vending in US schools

32.7% of elementary schools
71.3% of middle schools
89.4% of high schools

Have either a vending machine or a school store, canteen, or snack bar where students could purchase competitive foods or beverages

School Health Policies and Programs Study 2006 (SHPPS)
Vending Laws in Louisiana

- **Vending Machines**
  - Many States have set into law certain criteria for snacks that can be sold on school campuses and in school vending machines.

- In Louisiana, the standards for each snack:
  - 150 Calories or less
  - 35% of the total Calories from Fat or Less
  - 10% of the total Calories from Saturated fat or less
  - 30g of sugar or less
  - 360 mg of sodium or less
**Louisiana Action for Healthy Kids - Team Nutrition**
**Healthy Eating**

The two US Dietary Guidelines, "Aim for a Healthy Weight" and "Be Physically Active Each Day," go hand in hand. A healthy weight can not be achieved without addressing both issues. Information on this page focuses on healthy eating.

**Dietary Guidelines and the Food Guide Pyramid**
The U.S. Dietary Guidelines were created to provide consumers with strategies to eat healthfully based on scientific research. One of the Guidelines is to "Let the Pyramid Guide Your Food Choices."

**U.S. Dietary Guidelines**
- [Food Guide Pyramid](#)
- [Food Guide Pyramid for Young Children](#)

**School Lunch**
- [School Lunch Nutritional Requirements](#)
- [Time for Lunch](#)
- [USDA Team Nutrition](#)

**Portions**
This site provides a quiz comparing current portions to portions 20 years ago:
- [Portion Distortion](#)

**Fundraising**
- [Pennington Biomedical Research Center - Approved Vending List for Schools](#)
- [Creative Fundraising Activities](#)
- [Creative Financing and Fun Fundraising](#)

**Snacks**
Most of us think of snack and party foods as those that are traditionally high in sugar and fat, but low in nutrients. However, well-planned parties and snacks, served during school, can be part of a healthful diet for children. The two resources linked below provide healthy snack tips:

- [Parents' Top Ten Snack Tips](#)
- [A to Z Snack List](#)
- [The USDA AfterSchool Snack Program website offers some snack ideas for kitchens with traditional and limited facilities:](#)
## PBRC Executive Director Offers Correction to Time Magazine Article

### PBRC News Wire
- **Want a successful diet? Just pick one.**
  - Monday, February 23, 2009
- **National Grocery Manufacturers and Surgeon General learn the latest from local**
  - Friday, January 30, 2009
- **New Clinical Research Building Underway**
  - Wednesday, January 14, 2009
- **Experts grade children’s health; Louisiana gets a “D” and tips to improve**
  - Monday, September 22, 2008
- **Pennington Biomedical Research Center Opens New Community Based Research Center**
  - Friday, May 23, 2008

### Healthier Living
- **Nutrition Fact Sheets**
  - Get the facts on blueberries, garlic, trans fat, and lots more!
- **Take 5 for Diabetes**
  - A series of classes for those with Type II diabetes, metabolic syndrome, pre-diabetes or those who have a family history of diabetes.
- **Pounds Lost Study Monocle**
  - View the menus given to participants in the NIH-funded Pounds Lost study. Additional menus will be posted in the future.
- **Finding 100 Calories**
  - On average, eating 100 less calories a day can help stop weight gain. Here’s a list of foods that could be cut from an average person’s diet.
- **Vending List for Schools**
  - A list of foods and beverages approved for vending in public elementary and secondary schools.

### Featured Studies
- **PINNI**
  - A study researching if a breakfast drink made with a natural product will help reduce hunger and prevent overeating.
- **DAPA**
  - A study looking at the impact of an investigational medication on how your body uses sugar and insulin.
- **EAT**
  - A study determining how your body weight today impacts your health in the future.

[More Studies]
The Division of Education

Approved Vending List for Schools

Last Updated: September 15, 2009

Senate Bill No. 146, Act No. 331 was approved during the Louisiana Legislature's Regular Session 2005. This bill limits the sale of certain beverages and foods in public elementary and secondary schools during specified time periods. The Approved Vending List for Schools is a work in progress and more foods which fit the criteria will be added to the list as they are available.

To submit a product for evaluation and possible acceptance into the approved listing, send appropriate descriptive and serving size information along with the Nutrition Facts label to Catherine Champagne, Ph.D., R.D. by one of the following:

E-mail: catherine.champagne@pbrc.edu

Fax: 225-763-3045

Regular Mail:
Catherine Champagne, Ph.D., R.D.
6400 Perkins Road
Baton Rouge, LA 70808
Key Points

- Vending and other concessions available 30 minutes prior to and after school day, and last 10 minutes of lunch period.

**Beverages:**
- Fruit juices (100%)
- Milk, low-fat, skim, flavored, & non-dairy
- Water, plain or unflavored

Exclusion of foods of minimal nutritional value, to include snacks or desserts:
- exceeding 150 calories
- exceeding 35% of calories from fat, and 30 grams of sugar (exception unsweetened, uncoated nuts and seeds)
Key Points

- Public elementary and secondary schools:
  - 100% of items in vending and other sales need to come from the foods on the approved list.

- Public high schools:
  - 50% of items need to come from this list.

- Bill states that Pennington Biomedical Research Center is authorized to assess compliance and may provide assessments of nutritional value of foods contemplated for sale on public school grounds.
Submission Process

- According to the website
  - To submit a product for evaluation and possible acceptance into the approved listing, send appropriate descriptive and serving size information along with the Nutrition Facts label to Catherine Champagne, Ph.D., R.D. by email, fax, or regular mail (information on website).
Vending Categories

- Fresh fruit and fruit juices
- Beverages (water)
- Canned/dried fruit
- Frozen products
- Smoothies, etc.
- Dairy products
- Chips/pretzels/other snacks
- Breakfast/cereal/energy bars
- Cookies/crackers
- Nuts/seeds
- Miscellaneous
## Vending Snacks Meeting Recommended Criteria

150 calories or less
35% of total calories from fat or less
10% of total calories from saturated fat or less
30 g of sugar or less
360 mg of sodium or less per serving

### ITEM

<table>
<thead>
<tr>
<th>Item</th>
<th>Serving Size (Weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh Fruit/Fruit Juices</td>
<td></td>
</tr>
<tr>
<td>Apple</td>
<td>1 medium</td>
</tr>
<tr>
<td>Banana</td>
<td>1 medium</td>
</tr>
<tr>
<td>Orange</td>
<td>1 medium</td>
</tr>
<tr>
<td>Pear</td>
<td>1 medium</td>
</tr>
<tr>
<td>Tangerine</td>
<td>1 medium</td>
</tr>
<tr>
<td>Juice Alive 100% Fruit Juice</td>
<td>8 fl oz (240 ml)</td>
</tr>
<tr>
<td>Kraft Foods CapriSun 100% Fruit Juice - Apple Splash</td>
<td>8.75 fl oz pouch (200 ml)</td>
</tr>
<tr>
<td>Kraft Foods CapriSun 100% Fruit Juice - Berry Breeze</td>
<td>8.75 fl oz pouch (200 ml)</td>
</tr>
<tr>
<td>Kraft Foods CapriSun 100% Fruit Juice - Fruit Dive</td>
<td>8.75 fl oz pouch (200 ml)</td>
</tr>
<tr>
<td>Kraft Foods CapriSun 100% Fruit Juice - Grape Tide</td>
<td>8.75 fl oz pouch (200 ml)</td>
</tr>
<tr>
<td>Lucky Leaf Apple Juice</td>
<td>5.5 fl oz</td>
</tr>
<tr>
<td>Minute Maid® 100% Juice Pouch</td>
<td>6.75 fl oz (1 juice box)</td>
</tr>
<tr>
<td>Minute Maid® 100% Apple Juice</td>
<td>6.75 fl oz (200 ml)</td>
</tr>
<tr>
<td>Minute Maid® 100% Apple White Grape Juice</td>
<td>6.75 fl oz (200 ml)</td>
</tr>
<tr>
<td>Mott's Fruit Punch (100% Juice)</td>
<td>6.75 fl oz (1 juice box)</td>
</tr>
<tr>
<td>Nestle Juicy Juice All Natural 100% Juice - All Flavors</td>
<td>6.75 fl oz</td>
</tr>
<tr>
<td>V-8 Low Sodium 100% Vegetable Juice</td>
<td>5.5 fl oz</td>
</tr>
<tr>
<td>Welch's 100% Grape Juice</td>
<td>5.5 fl oz</td>
</tr>
</tbody>
</table>

### Beverages

| Bottled Water, plain | All sizes |

### Canned/Dried Fruit

<table>
<thead>
<tr>
<th>Item</th>
<th>Serving Size (Weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Betty Crocker/General Mills Fruit Roll Ups (Blaslin' Berry Hot Colors)</td>
<td>0.5 oz (14 g) = 1 roll</td>
</tr>
<tr>
<td>Betty Crocker/General Mills Fruit Roll Ups (Variety Pack)</td>
<td>0.5 oz (14 g) = 1 roll</td>
</tr>
<tr>
<td>Betty Crocker Fruit by the Foot - All Flavors</td>
<td>0.75 oz (21 g) = 1 roll</td>
</tr>
<tr>
<td>Dakota Gourmet/Kettle Valley Real Fruit Bars - All Flavors</td>
<td>20 g bar</td>
</tr>
<tr>
<td>Del Monte Diced Peaches In '100% Juice In Pull Top Cans</td>
<td>4 oz</td>
</tr>
<tr>
<td>Del Monte Lite Mixed Fruit in Pull Top Cans</td>
<td>4 oz</td>
</tr>
<tr>
<td>Del Monte Mixed Fruit in Plastic Cups</td>
<td>4 oz</td>
</tr>
<tr>
<td>Del Monte Tropical Fruit In Plastic Cups</td>
<td>4 oz</td>
</tr>
<tr>
<td>Edy's Fruit Bars - Strawberry</td>
<td>88 g bar</td>
</tr>
<tr>
<td>General Mills Fruit Roll Ups (All Flavors)</td>
<td>0.5 oz (14 g) = 1 roll</td>
</tr>
<tr>
<td>Global Brands LLC, Fruit Rolls (65% Fruit Juice)</td>
<td>1 piece (21 g)</td>
</tr>
</tbody>
</table>
Issues with Submissions

- **Products rejected (~160)**
  - Too many calories – 47 (29%)
  - Too high in fat – 82 (51%)
  - Too high in saturated fat – 86 (54%)
  - Too high in sugar – 3 (2%)
  - Too high in sodium – 10 (6%)
  - Other problems – 24 (15%)
  
  - Only provided calories, sodium, and sugar; e.g. Airheads candy, some beverages, gummy candies, taffy candy, etc (meet the calorie goal but offer nothing else)
Regarding the nutritional requirements listed at the top of the approved list: I know that 150 calories or less, 35% of total calories from fat or less, and 30 g of sugar or less are requirements listed in Act 331. However, I’m not familiar with the sodium and saturated fat requirements that are listed. What is the source for these?

The additional requirements were imposed by the Department of Education. They were supposed to make it in the final wording of the bill. They are good things and they worked with me to draft them. You will have to contact them as to the enforcement policies.
Issues with Submissions

Emailed questions:

- We noticed that D'Fazzio's Turnovers were approved. I noticed his portion size is listed as 3 oz which is extremely small and hard to prepare. How can I get a copy of his nutritional facts to compare to ours? We have been making these little turnovers for 10 years for the schools until the recent change in guidelines. Many of the schools prefer to work with us and prefer our product. I would like to work with you if possible to make our product available to the schools.
Some labels are not correct:

<table>
<thead>
<tr>
<th>Apple Turnover</th>
<th>Lemon Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NUTRITIONAL FACTS</strong></td>
<td><strong>NUTRITIONAL FACTS</strong></td>
</tr>
<tr>
<td><strong>Serving Size</strong> (5.18 oz)</td>
<td><strong>Serving Size</strong> (5.18 oz)</td>
</tr>
<tr>
<td><strong>Amount per serving</strong></td>
<td><strong>Amount per serving</strong></td>
</tr>
<tr>
<td>Calories</td>
<td>140</td>
</tr>
<tr>
<td>Total Fat</td>
<td>5 g</td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>1.5 g</td>
</tr>
<tr>
<td>Unsaturated Fat</td>
<td>0</td>
</tr>
<tr>
<td>Polysaturated Fat</td>
<td>0</td>
</tr>
<tr>
<td>Trans Fat</td>
<td>0</td>
</tr>
<tr>
<td>Monosaturated Fat</td>
<td>0</td>
</tr>
<tr>
<td>Cholesterol (mg)</td>
<td>0 mg</td>
</tr>
<tr>
<td>Sodium (mg)</td>
<td>72.5 mg</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>66 g</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>2 g</td>
</tr>
<tr>
<td>Sugars</td>
<td>17 g</td>
</tr>
<tr>
<td>Protein</td>
<td>8 g</td>
</tr>
</tbody>
</table>

**Question:** Who is doing these food labels?
Issues with Submissions

My response:

- Here is a real problem. You must realize that there are significant computational problems in these labels. Just doing the math, carbohydrates and protein each contribute 4 calories per gram and fats contribute 9 calories per gram. It is necessary for me to figure out if the label is correct, especially since it is not coming from a national company. According to the information you gave me, my initial thought was they would pass, then I looked at where the calories were coming from and the alarm went off! I have been working on this for a few days now, and have tried to work out the nutritional facts several times and I have come up with the same each time.
Issues with Submissions

Emailed response re/turnovers:

- Is it possible I am figuring this incorrectly?
- I am using the label from the product's packaging, dividing everything out and then recalculating according to what measurements we are using.
- I am attaching the individual ingredients. I don't mean to take up much of your time. If you can give me any additional help it would be greatly appreciated.
- My response was to find a professional to do this because she was not qualified to compute the Nutrition Facts Label.
Dr. Champagne,

Thank you for posting the approved list of snack foods on your website based on the recent passage of Act. 331 by the legislature. Many parent groups or school clubs often sell regular popcorn and pickles as fundraisers after lunch. My question is with Cracker Jacks original being on the approved list, does this mean that regular popcorn can still be sold? How about pickles?
New Initiative from the State Dept of Nutrition Education Division: USDA Healthier US School Challenge (HUSSC)

- For food items sold outside the NSLP, the Challenge criteria sets limits on total fat, saturated fat, trans fats, sugar, sodium, and portion size or calories.
  - Total fat – 35% of calories or less (excludes nuts, seeds, nut butters, and reduced fat cheese)
  - Saturated Fat – less than 10% of calories (excludes reduced fat cheese)
  - Trans fat – none or less than 0.5 grams per serving
  - Sugar – 35% of weight or less (excludes fruits, vegetables, and milk)
  - Sodium – For Bronze, Silver, and Gold awards: 480mg or less sodium per side dish; 600 mg or less sodium per entrée
New Initiatives from the State Dept of Nutrition Education Division

- Portion size/calories – Portion size/calories is limited by restricting school-made a la carte sales to size of serving in NSLP; for packaged items, not to exceed 200 calories
- For Gold Award of Distinction: 200 mg or less sodium per side item; 480 mg or less per entrée.

- These are the only approved beverages for foods sold or offered outside the school meal programs:
  - Water--non-carbonated, nonflavored, no sweeteners (nutritive or non-nutritive); non-caffeinated
  - Milk - only lowfat (1%) or fat-free; limit to 8 fl. oz
  - Juice - only 100% fruit or vegetable juice; no sweeteners (nutritive or non-nutritive); limit to 6 fl. oz.
## Criteria for the HealthierUS School Challenge - Competitive Foods & Beverages

<table>
<thead>
<tr>
<th>HealthierUS School Challenge Criteria</th>
<th>Award Level General Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bronze</td>
</tr>
<tr>
<td>1. <strong>Competitive food &amp; beverages</strong> must meet the following criteria:</td>
<td></td>
</tr>
<tr>
<td><strong>Competitive Foods:</strong></td>
<td></td>
</tr>
<tr>
<td>a. <strong>Total fat:</strong> Calories from total fat must be at or below 35% per serving. Excludes nuts, seeds, nut butters, and reduced fat cheese.</td>
<td>√</td>
</tr>
<tr>
<td>b. <strong>Trans fat:</strong> Less than 0.5 grams (trans fat-free) per serving</td>
<td>√</td>
</tr>
<tr>
<td>c. <strong>Saturated fat:</strong> Calories from saturated fat must be below 10%. Excludes reduced-fat cheese.</td>
<td>√</td>
</tr>
<tr>
<td>d. <strong>Sugar:</strong> Total sugar must be at or below 35% by weight (includes naturally occurring and added sugars). Excludes fruits, vegetables, and milk.</td>
<td>√</td>
</tr>
<tr>
<td>e. <strong>Sodium:</strong> Bronze/Silver/Gold: Must be at or below 480 mg per side dish/non-entree serving Must be at or below 600 mg per main dish/entree serving <strong>Gold Award of Distinction</strong>: Must be at or below 200 mg per non-entrée; ≤ 480 mg per entrée OR PE is 150 minutes/week</td>
<td>≤ 480 mg sodium per non-entrée; ≤ 600 mg per entrée</td>
</tr>
<tr>
<td>f. <strong>Portion size/Calories:</strong> Not to exceed the serving size of the food served in the NSLP; for other items, the package or container is not to exceed 200 calories.</td>
<td>√</td>
</tr>
<tr>
<td><strong>Competitive Beverages:</strong> Only the following beverages are allowed.</td>
<td></td>
</tr>
<tr>
<td>• <strong>Milk:</strong> Only low-fat (1% or less) and fat-free (skim), flavored or unflavored fluid milk, and/or USDA approved alternative dairy beverages; limit serving size to maximum of 8 fluid ounces.</td>
<td>√</td>
</tr>
<tr>
<td>• <strong>100% full strength fruit &amp; vegetable juices</strong> with no sweeteners (nutritive or non-nutritive); limit serving size to maximum of 6 fluid ounces.</td>
<td>√</td>
</tr>
<tr>
<td>• <strong>Water:</strong> non-flavored, no sweeteners (nutritive or non-nutritive), non-carbonated, non-caffeinated.</td>
<td>√</td>
</tr>
</tbody>
</table>
To coordinate efforts with the state, the listing will be amended to potentially delete some or all of the following items:

- Fruit Roll-Ups and fruit leathers
- Smoothie type beverages
- Chips and snacks with more than 200 mg of sodium per serving

Also, we have identified products which have changed such that they no longer meet the old criteria and have been removed from the current listing.
Conclusions

- Keeping up with the vending list for schools continues to be an ongoing process with many challenges.
- Legislators need to revamp the bill so that all the criteria that go into the approval process are contained within the legislation.
Finally

- Please tell everyone out there that while a pickle is low fat and some might think it’s a vegetable, it is never going to make the list for an acceptable concession item. It is way too high in sodium.

- Try selling the cucumber instead!!
Merci
de votre attention