**Purpose**
The purpose was to analyze in-classroom breakfast menus from five districts for production methods, food costs, and compliance with the 2010 Dietary Guidelines for Americans (DGA).

**Method**
- Case study research methodology was used to determine effectiveness of in-classroom breakfast.
- State agencies recommended exemplary districts offering in-classroom breakfast programs.
- After a pilot visit to a Midwest USDA Region district, four districts of varying sizes in the Mid-Atlantic, Northeast, Western, and Mountain Plains USDA Regions were visited.
- Production methods, food costs, and nutrient information were collected from school nutrition directors and managers.

**Results**
- School nutrition (SN) directors ranked nutritive value, food costs, and student preferences as their greatest considerations when planning in-classroom breakfast menus.
- One district had a central kitchen which produced and packaged 21.6% of the breakfast menu items including muffins and mini loaves.
- Three districts purchased prepackaged foods and two districts served cold menu items.
- The most popular breakfast foods were cheese bread, mini pancakes, muffins, burritos, and honey graham cereal.
- Food costs of sample breakfast menus ranged from $0.50 to $1.04 and menus met the DGA.

**Application**
- District directors need to work closely with manufacturers to find items that are individually wrapped, meet nutrition guidelines, and are accepted by students.
- Key DGA recommendations include reducing intake of sodium; limiting consumption of saturated and trans fats; increasing consumption and variety of fruits and vegetables; and increasing intake of fat-free and low-fat milk products and whole grains.
- Directors demonstrated that breakfast menus can meet cost constraints and can be aligned with the 2010 DGA.

**Tips for Menu Planning**
- With its large central kitchen, the pilot district can offer many items prepared in-house, such as muffins, whole wheat cheese bread, and a breakfast cookie. This district has three-week cycle menu and employs a quality control specialist to analyze menu items and the full menu.
- District A is a large district with four registered dietitians on staff who review the menus for compliance with nutrition standards.
- The SN director in District C is a member of a purchasing cooperative that continually looks for new menu items and works closely with manufacturers to find products that meet nutrition specifications. To encourage reduced intake of added sugars this director limits purchases of prepackaged foods to those that contain 9 grams or less of sugar per serving.

**Most Popular In-Classroom Breakfast Menu Items**

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Pilot District</th>
<th>District A</th>
<th>District B</th>
<th>District C</th>
<th>District D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheese Bread</td>
<td>Mini Pancakes</td>
<td>Muffin</td>
<td>Beef and Bean Burrito</td>
<td>Honey Graham Cold Cereal</td>
<td></td>
</tr>
<tr>
<td>Banana Chocolate Chip Muffins</td>
<td>Mini Cinnamon Rolls</td>
<td>Granola Bar</td>
<td>Peanut Butter and Jelly Sandwich</td>
<td>Berry Puffed Corn Cereal</td>
<td></td>
</tr>
<tr>
<td>Toasted Cinnamon Cold Cereal</td>
<td>Mini Waffles</td>
<td>Honey Bun</td>
<td>Egg to Go in Tortilla</td>
<td>Apple Cinnamon Oat Cold Cereal</td>
<td></td>
</tr>
<tr>
<td>Honey Graham Cold Cereal</td>
<td>Granola Bar</td>
<td>Fruit Bar</td>
<td>Grilled Cheese Sandwich</td>
<td>Crispy Rice Cold Cereal</td>
<td></td>
</tr>
<tr>
<td>Yogurt</td>
<td>Mini Loaf</td>
<td>French Toast</td>
<td>Peanut Butter and Jelly Sandwich</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit</td>
<td>Cold Cereal</td>
<td>Cold Cereal</td>
<td>Hard Cooked Eggs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Pie Chart**

- Pie chart showing the percentage of breakfast menu items from each district.

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