What Are Students Preferences for Local Blueberry Foods in School Meals?

Samane Zare, Timothy Woods, Wuyang Hu, and Marv Batte
Department of Agricultural Economics, University of Kentucky

Background

The Kentucky Blueberry Growers Association (KBGA) is a marketing association of blueberry growers in Kentucky. KBGA worked with the University’s Food System Innovation Center to develop value-added products for the blueberry industry in Kentucky and surrounding states, particularly reaching out to schools. The Farm-2-School program with the Kentucky Department of Agriculture (KDA) is designed to bring high quality, fresh KY proud products to school systems. Students and food service staff are interested in a variety of products. This study explored ways to prioritize value-added product options that might use local blueberries through in-school sensory analyses.

Objectives

The goal of this study is to examine differences in student preferences for prospective local blueberry products in order to promote Kentucky Proud blueberries in the schools of this state.

Data and Results

A food choice preference study was designed and conducted in area schools including 10 different value-added blueberry products: Granola Bar, Cookie, Layered Bar, Fresh Blueberries, Fruit Salad, Muffin, Plain Blueberry Smoothie, Blueberry Parfait, Blueberry Oatmeal Banana Smoothie, and Mixed Fruit Parfait. Two flights of four randomly assigned products were served to 200 students from elementary schools, middle schools and high schools in Lexington, Kentucky area, using the Best-worst method popular in business-marketing research (Lusk and Briggeman, 2009). Part of this process required students to indicate which of the sampled food items was their “most favorite” and which was the “least favorite”. Differences in preferences were examined across school groups.

<table>
<thead>
<tr>
<th>Student Rating of Favorite and Least Favorite Blueberry Products</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Muffin</td>
</tr>
<tr>
<td>Blueberry Parfait</td>
</tr>
<tr>
<td>Mixed Fruit Parfait</td>
</tr>
<tr>
<td>Cookie</td>
</tr>
<tr>
<td>Granola Bar</td>
</tr>
<tr>
<td>Layered Bar</td>
</tr>
<tr>
<td>Fruit Salad</td>
</tr>
<tr>
<td>Plain Blueberry Smoothie</td>
</tr>
<tr>
<td>Fresh Blueberries</td>
</tr>
<tr>
<td>Blueberry Oatmeal Banana Smoothie</td>
</tr>
</tbody>
</table>

Some products were clearly popular across all school groups simply looking at frequency of favorite/least favorite. Some differences in preferences were also evident. Muffins and parfaits were most popular with younger students – less so in high school. The cookies and bars were noted as more popular with older students. Smoothies and plain fresh fruit didn’t seem to be popular in any class.

Developing products that will be successfully adopted is a challenge. It has to work for the blueberry growers, the school nutritionists, the cafeteria staff, and the students. These results suggest value added products are important for the students and that there are differences across age groups. This will require a more complex production and marketing strategy for local blueberries into this market for the KBGA.

Experience with Blueberry Products

Students indicated a relatively limited experience with blueberry products prior to the sampling exercise in school. Only about 1 in 5 students indicated they eat blueberries a lot. The presence of new blueberry-based recipes that appeal to students has the potential to increase their consumption. These products can fit well in elementary schools, middle schools and high schools in Lexington, Kentucky area, using the Best-worst method popular in business-marketing research (Lusk and Briggeman, 2009). Part of this process required students to indicate which of the sampled food items was their “most favorite” and which was the “least favorite”. Differences in preferences were examined across school groups.

Experience with Blueberry Consumption

- Never Tried: 15%
- Tried, didn’t like: 17%
- Tried, Like, Eat a lot: 21%
- Tried, Like, Eat sometimes: 26%
- Tried, Like, Eat sometimes: 25%

References


Acknowledgments

We would like to that the USDA-Federal State Market Improvement Program for funding and the partnership of the Kentucky Blueberry Growers Association and the Kentucky Department of Agriculture. We also appreciate the assistance of the teachers and students that participated from the Lexington, KY schools.

Contact “samane.zare@uky.edu” for more information.