SPILLING THE BEANS: A PRESCHOOL GARDENING AND NUTRITION EDUCATION CURRICULUM TO INCREASE THE USE OF DRY EDIBLE BEANS

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OBJECTIVES

The objectives of the four-lesson “Spilling the Beans” curriculum, which was reviewed by child development experts, are the following:

• Parents will be able to identify health benefits associated with beans
• Children will increase their knowledge of gardening
• Children will improve their knowledge of MyPlate
• Children will increase their awareness of different varieties of beans
• Children and parents will have the opportunity to taste/try recipes containing beans

METHODS

The four-lesson curriculum emphasizes the benefits of dry bean consumption, gardening and nutrition through hands-on activities and taste-testing. Participants planted a bean garden, sprouted beans and created their own MyPlate among the many activities. Parents were given a newsletter with nutrition information, recipes and bean preparation tips each week.

EVALUATION

• Pre/post survey for parents
• Comments from providers
• Sensory surveys/taste test surveys for children
• Taste testing results (rating scale 1-least liked to 3-most liked)

RESULTS

Forty seven families participated in the pilot project.

• Parents/caregivers significantly increased their awareness of beans as a source of fiber and folate and the link between beans and blood sugar management
• The use of canned beans among the families significantly increased
• About 88% of the parents reported reading the newsletter
• 69% said their child talked about beans
• 83% reported that their child talked about the gardening
• 85% of the children talked about tasting bean recipes.

CONCLUSION

The “Spilling the Beans” lesson series significantly increased the awareness of preschoolers and their parents/caregivers of the benefits of dry edible bean consumption.

RECIPE RATING

<table>
<thead>
<tr>
<th>Recipe</th>
<th>Rating</th>
<th>Would you eat this at home?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Bean Brownies</td>
<td>2.9</td>
<td>97.9%</td>
</tr>
<tr>
<td>Cowboy Beans</td>
<td>2.7</td>
<td>87.1%</td>
</tr>
<tr>
<td>Pinto Bean Beef Tacos</td>
<td>2.7</td>
<td>87.5%</td>
</tr>
<tr>
<td>Apple Cinnamon Muffins</td>
<td>2.7</td>
<td>94.6%</td>
</tr>
<tr>
<td>Chocolate Chip Bean Muffins</td>
<td>2.6</td>
<td>96%</td>
</tr>
<tr>
<td>3 Bean Chili</td>
<td>2.5</td>
<td>76.4%</td>
</tr>
<tr>
<td>Hummus</td>
<td>2.5</td>
<td>72.7%</td>
</tr>
<tr>
<td>Black Bean Fruit Salsa</td>
<td>2.3</td>
<td>61.9%</td>
</tr>
<tr>
<td>Seasoned Green Bean Fries</td>
<td>2.2</td>
<td>46.2%</td>
</tr>
<tr>
<td>Black Bean Sandwich Spread</td>
<td>2.0</td>
<td>50%</td>
</tr>
</tbody>
</table>