USING MUSIC PARODIES IN FOOD SAFETY EDUCATION

Carl K. Winter, Sandra M. McCurdy, Susan K. Hovey, Elizabeth Hoyle, Angela M. Fraser, Sue Snider, and Jeanne Gleason
TAKE OUT MENU

Entrées

1. Stomachache Tonight
   (Eagles, Heartache Tonight)
2. Veggie Believer
   (Monkees, I'm A Believer)
3. You Better Wash Your Hands
   (Beatles, I Wanna Hold Your Hand)
4. Stayin' Alive
   (BeeGees, Stayin' Alive)
5. We Are The Microbes
   (Queens, We Are The Champions)
6. Still Seems Like Food To Me
   (Billy Joel, Still Rock and Roll To Me)
7. Don't Get Sicky Wit It
   (Will Smith, Gettin' Jiggly Wit It)
8. A Case Of Norwalk
   (The Drifters, Under The Boardwalk)
9. U.S.D.A.
   (Village People, Y.M.C.A.)
10. Mantenga Bien La Comida
    (Ritchie Valens, La Bamba)
11. Fifty Ways to Eat Your Oysters
    (Paul Simon, Fifty Ways to Leave Your Lover)
12. Clonin’ DNA
    (Beach Boys, Surfin’ USA)
13. I Sprayed It On The Grapevine
    (Marvin Gaye, I Heard It Through The Grapevine)
14. Eat It
    (Michael Jackson, Beat It)
15. Don’t Be A Gambler
    (Kenny Rogers, The Gambler)
16. I Will Survive
    (Gloria Gaynor, I Will Survive)
17. Rat Number 49
    (Clovers, Love Potion Number Nine)
18. Beware La Vaca Loca
    (Ricky Martin, Livin’ La Vida Loca)
19. Frank N. Foode
    (Chuck Berry, Johnny B. Goode)
20. Food Irradiation
    (Little Eva, Do The Locomotion)
21. Political Hay
    (Carl Winter, original)
Acknowledgement

The six state project, *Improving Food Safety Through the Use of Music-based Curricula*, was partially funded through a grant from the National Integrated Food Safety Initiative (Grant No. 2002-51110-01979) of the Cooperative State Research, Education and Extension Service, U. S. Department of Agriculture.
University of Idaho

- Audience - high school students
- Compared responses of students receiving standard curricula with those receiving curricula enriched with music
- Results analyzed by student gender, class size, and teacher experience
Results

Safe food handling attitude scores of Control and Music-added group students were not different.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>All Students (n=287)</th>
<th>Males (n =118 )</th>
<th>Females (n =169)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>4.6 a</td>
<td>4.5 a</td>
<td>4.7 a</td>
</tr>
<tr>
<td>Music-added</td>
<td>4.9 a</td>
<td>5.1 b</td>
<td>4.9 a</td>
</tr>
</tbody>
</table>

1Scores within a column followed by different letters are significantly different P <0.05.
Results

Unsafe food handling attitude scores of Control and Music-added group students from classrooms grouped by teacher experience \(^1\) (highest possible score = 8)

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Teacher experience</th>
<th>More</th>
<th>Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>More</td>
<td>4.4 a</td>
<td>5.0 a</td>
</tr>
<tr>
<td>Music-added</td>
<td>More</td>
<td>5.0 b</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Less</td>
<td></td>
<td>4.8 a</td>
</tr>
</tbody>
</table>

\(^1\)Scores within a column followed by different letters are significantly different \(P < 0.05\).
### Results - Opinions

**Did you like the songs?**

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>47%</td>
</tr>
<tr>
<td>No</td>
<td>28%</td>
</tr>
<tr>
<td>No opinion</td>
<td>26%</td>
</tr>
</tbody>
</table>

**By classroom**

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly liked</td>
<td>5</td>
</tr>
<tr>
<td>Mostly did not like</td>
<td>2</td>
</tr>
<tr>
<td>Split</td>
<td>2</td>
</tr>
</tbody>
</table>
University of Delaware

- Audience - youth 8-12 in summer program (N=541)
- Music incorporated into all food safety educational material that also included cartoons, other activities, and preparing food items
- Students completed pre- and post-tests to determine improvement
## DELAWARE RESULTS

<table>
<thead>
<tr>
<th>Cartoon Topic</th>
<th>Pretest (%)</th>
<th>Post test (%)</th>
<th>Improvement (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Putting milk in refrigerator</td>
<td>84</td>
<td>97</td>
<td>13</td>
</tr>
<tr>
<td>Using same plate for raw and cooked meat</td>
<td>64</td>
<td>90</td>
<td>26</td>
</tr>
<tr>
<td>Slicing vegetables on board used for raw chicken</td>
<td>69</td>
<td>93</td>
<td>23</td>
</tr>
<tr>
<td>Keeping food for someone late for a meal</td>
<td>56</td>
<td>85</td>
<td>28</td>
</tr>
<tr>
<td>Washing hands before a meal</td>
<td>68</td>
<td>86</td>
<td>18</td>
</tr>
<tr>
<td>Keeping lunch at a safe temperature</td>
<td>71</td>
<td>86</td>
<td>15</td>
</tr>
</tbody>
</table>
Clemson University

• Targets - food service managers (105), culinary arts students (267), culinary arts teachers (25)
• Primarily qualitative
• Participants asked to remember the main messages of each song as well as provide general feedback
Clemson Results

“Do you remember the main message of each song?

<table>
<thead>
<tr>
<th>Name of song</th>
<th>Culinary arts students (percentage remembering)</th>
<th>Food service managers (percentage remembering)</th>
</tr>
</thead>
<tbody>
<tr>
<td>You’d Better Wash Your Hands</td>
<td>72.2</td>
<td>96.2</td>
</tr>
<tr>
<td>They Might Kill You / We Are the Microbes</td>
<td>57.7</td>
<td>90.5</td>
</tr>
<tr>
<td>Stayin’ Alive</td>
<td>68.2</td>
<td>93.3</td>
</tr>
<tr>
<td>Don’t Be a Gambler</td>
<td>49.1</td>
<td>94.3</td>
</tr>
</tbody>
</table>
Findings Of Interest

• Culinary arts students
  – “Did you like the music?”
  – Yes (41%), No (59%)

• Culinary arts teachers
  – “Do you think your students would like to work on a special project dealing with food safety songs?”
  – Yes (100%)

• Very different responses from culinary arts students and food service managers
SOME GENERAL CONCLUSIONS

• Music can be used to improve food safety education
• Musical styles and messages need to be tailored for individual audiences
• Individual instructors may have significant influence in determining how well food safety music aids learning
• Music needs to be available in formats that are easy for instructors to use (DVD, CD, PowerPoint, Flash, VCR, etc.)
ANIMATED MUSIC VIDEOS

• Produced by collaborators at New Mexico State University
• Flash format
• Can be played on-line from http://foodsaf.ucdavis.edu
• Flash files can be downloaded in Windows and Mac formats from website