Northeast consumers' attitudes towards farmed seaweed

Mary Ellen Camire
Chantel Banus

Follow this and additional works at: https://digitalcommons.library.umaine.edu/ari_rd-ed
Northeast consumers’ attitudes towards farmed seaweed

Mary Ellen Camire and Chantel Banus
School of Food & Agriculture
University of Maine
Background

• Very little public information is available about seaweed consumption and consumer attitudes about seaweed products in the United States.

• Food neophobic people do not like to try new foods, and may be less likely to try seaweed products.

• We undertook an online survey in Fall 2017 of residents of the Eastern coastal states who were at least 21 years old and responsible for most of the grocery shopping for their household.
Research Methods

• Survey Sampling International, LLC (now Dynata) sent link to randomly selected participants who were screened for inclusion criteria.

• Reading level = grade 7.7

• $1.00 compensation

• Food Neophobia was grouped by tertile:
  • 10-29 = low Food Neophobia
  • 30-38 = medium Food Neophobia
  • ≥ 39 = high Food Neophobia
Results

1,116 total respondents (live in a Northeastern state, responsibility for food shopping, age 21 and older)

- 15 responses excluded for minimal answers
- 51 respondents who did not complete the Food Neophobia Scale
- 1,101 responses included for demographic analysis only
- 1,065 responses used for Food Neophobia Scale analysis
## Demographic profile of FN groups

<table>
<thead>
<tr>
<th></th>
<th>Overall (n=1065)</th>
<th>Low (n=357)</th>
<th>Medium (n=340)</th>
<th>High (n=368)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(21-30)</td>
<td>25.7%</td>
<td>25.8%</td>
<td>27.0%</td>
<td>24.5%</td>
</tr>
<tr>
<td>(61-70)</td>
<td>20.0%</td>
<td>17.4%</td>
<td>18.5%</td>
<td>23.9%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College grad</td>
<td>29.0%</td>
<td><strong>33.9%</strong></td>
<td>27.9%</td>
<td>25.3%</td>
</tr>
<tr>
<td>Some college</td>
<td>23.9%</td>
<td>26.6%</td>
<td>24.7%</td>
<td><strong>20.7%</strong></td>
</tr>
<tr>
<td>High school</td>
<td>16.0%</td>
<td>14.0%</td>
<td>12.6%</td>
<td>20.9%</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under $30,000</td>
<td>16.0%</td>
<td>12.3%</td>
<td>14.7%</td>
<td>20.9%</td>
</tr>
<tr>
<td>$50,000 - $74,999</td>
<td>18.6%</td>
<td>16.5%</td>
<td>21.2%</td>
<td>18.2%</td>
</tr>
<tr>
<td>$75,000 - $99,999</td>
<td>22.3%</td>
<td>23.8%</td>
<td>23.5%</td>
<td>19.8%</td>
</tr>
<tr>
<td>Over $100,000</td>
<td>22.0%</td>
<td><strong>27.7%</strong></td>
<td>19.1%</td>
<td>19.0%</td>
</tr>
<tr>
<td><strong>Prior Seaweed intake</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>46.5%</td>
<td><strong>63.6%</strong></td>
<td>43.8%</td>
<td>32.3%</td>
</tr>
<tr>
<td>No</td>
<td>44.1%</td>
<td>27.7%</td>
<td>46.2%</td>
<td>58.2%</td>
</tr>
</tbody>
</table>
Barriers to Seaweed Consumption

N = 490

- No interest: 42%
- Never thought to try: 23%
- Where to find it?: 12%
- Not available: 9%
- Unsure if tried: 6%
- Afraid: 3%
- Thyroid health: 2%
- Cost: 1%
- Allergy: 1%
- Safety: 1%
- Other: 1%

*Image shows a pie chart with the above percentages.*
Food Neophobia Among People Who Ate Seaweed in the Past Year

- Low (n = 357) - 32.3%
- Medium (n = 340) - 43.8%
- High (n = 368) - 32.3%

Food Neophobia Scale Classification

Responses

- Yes
- No
- Not sure
Reported Seaweed Preparation

- **Sushi**
  - High FN: 20%
  - Low FN: 52%
  - Medium FN: 31%

- **Salad**
  - High FN: 62%
  - Low FN: 38%

- **Dried**
  - High FN: 50%
  - Medium FN: 25%
  - Low FN: 25%

- **Soup/stew**
  - High FN: 30%
  - Medium FN: 30%
  - Low FN: 40%
Survey Respondents’ Interest in Foods with Seaweed Depends on Food Neophobia

![Bar Chart]

Count

Food Neophobia Classification

Yes
No
Not sure

Low
Medium
High
Role of nutrition claims in respondents’ purchasing behavior based on Food Neophobia

<table>
<thead>
<tr>
<th>Claim</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low calorie</td>
<td>0</td>
<td>2</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Source of Iodine</td>
<td>172</td>
<td>137</td>
<td>104</td>
<td>413</td>
</tr>
<tr>
<td>Source of Vitamin K</td>
<td>97</td>
<td>93</td>
<td>72</td>
<td>262</td>
</tr>
<tr>
<td>Organic</td>
<td>97</td>
<td>75</td>
<td>48</td>
<td>220</td>
</tr>
<tr>
<td>Local</td>
<td>120</td>
<td>110</td>
<td>79</td>
<td>309</td>
</tr>
<tr>
<td>Low carbohydrate</td>
<td>95</td>
<td>78</td>
<td>49</td>
<td>222</td>
</tr>
<tr>
<td>Source of calcium</td>
<td>93</td>
<td>67</td>
<td>52</td>
<td>212</td>
</tr>
<tr>
<td>Source of antioxidants</td>
<td>102</td>
<td>69</td>
<td>57</td>
<td>228</td>
</tr>
<tr>
<td>Sustainable</td>
<td>172</td>
<td>107</td>
<td>69</td>
<td>348</td>
</tr>
<tr>
<td>Have no interest in purchasing seaweed</td>
<td>86</td>
<td>67</td>
<td>31</td>
<td>182</td>
</tr>
<tr>
<td>None of the above motivates me</td>
<td>25</td>
<td>51</td>
<td>106</td>
<td>182</td>
</tr>
</tbody>
</table>
Conclusions

• Educational opportunity: respondents were not well aware of seaweed types they had consumed.

• All Food Neophobia groups agree on the value of cost, convenience, taste, nutrition & sustainability; how does the industry balance these messages?

• Future considerations
  • Influence of children in the household
  • Consumer overall impression of seaweed as healthy
  • Demographics of Food Neophobic groups in relation to purchasing behavior