Sophisticated Solutions for Simplified Labels

October 29-30, 2013 • Hyatt Lodge, Oak Brook, Illinois, USA

2013 Technology Snapshot Presentation

Purple Sweet Potato Juice Concentrate
By: Vegetable Juices, Inc.
Purple Sweet Potato Juice Concentrate

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New Product Development Manager
October 29, 2013
History

- Purple Sweet Potatoes were native to the Americas, and in same family as the morning glory
- Offers valuable alternative to farmers losing income from decreased tobacco demand in Stokes and surrounding counties
- “Stokes Purple” is a patented hybrid that thrives in Stokes County, North Carolina
- The climate and soil composition produces crops rich in natural purple color and nutrients (anthocyanins, polyphenols, potassium, calcium, iron, etc.)
pH implications of Anthocyanidins

- Red: pH \leq 3
- Purple: pH 4-5
- Brownish: pH 6-7
- Green: pH 7-8
- Yellow: pH > 8
Physiological Functions

• Purple sweet potatoes contain antioxidants that help guard against diseases like cardiovascular disease and cancer

• They boost immunity, are anti-inflammatory, and keep brain, bones and skin healthy

• The antioxidant known as anthocyanin is the purple pigment also found in Blueberries, red grapes and red cabbage

• The anthocyanin content in the Purple Sweet Potato Juice is comparable to levels found in Blueberry Juice
“Natural” Process

Cooked → Pressed → Pasteurized

Concentrated ← Clarified
# Nutritional Information

## Purple Sweet Potato vs. Conventional Sweet Potato

<table>
<thead>
<tr>
<th>Analytical</th>
<th>Purple Sweet Potato Juice Concentrate, 60 Brix, Frozen</th>
<th>Sweet Potato Juice Concentrate, 60 Brix, Frozen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>2.27%</td>
<td>2.56%</td>
</tr>
<tr>
<td>Calories Calculated</td>
<td>228 kcal/100 g</td>
<td>226 kcal/100 g</td>
</tr>
<tr>
<td>Carbohydrates, Calculated</td>
<td>53.23%</td>
<td>53.04%</td>
</tr>
<tr>
<td>Iron</td>
<td>102.6 mg</td>
<td>29.0 mg</td>
</tr>
<tr>
<td>Potassium</td>
<td>1.56%</td>
<td>1.72%</td>
</tr>
<tr>
<td>Sodium</td>
<td>0.02%</td>
<td>0.02%</td>
</tr>
<tr>
<td>Anthocyanins as Anthocyanidins</td>
<td>0.153% (w/w)</td>
<td>0.0230% (w/w)</td>
</tr>
</tbody>
</table>
Purple Sweet Potato Juice Concentrate *(Product of USA)*

Non Irradiated, Non Allergen, Kosher and Halal certified

- **Ingredient statement:**

  Purple Sweet Potato Juice Concentrate, Citric Acid

- **Analytical:**

  60° Brix, pH: 4.0 and 1.7% TA as Citric Acid

- **Shelf Life/Storage:**

  24 months/Frozen (-10 to 0°F)

- **Packaging:**

  Pails & Drums
Conclusions

- Purple Sweet Potato Juice Concentrate is a nutritious Ingredient from a super food that addresses stealth health and intuitive health concerns.

- The phytochemical, anthocyanin (purple color) content is heat, freeze-thaw stable, and light stable.

- Anthocyanin is stable at pH range of 3 to 4, making the purple sweet potato juice concentrate successful in beverages and other food systems.

- Overall, Purple Sweet Potato Juice Concentrate is naturally sweet with rich purple color that offers wholesome, clean label to various applications.
Thank You!!!

Address (Centrally located)

7400 South Narragansett Avenue
Bedford Park, Illinois 60638

180,000 Square feet Facility
Corporate Office, Production, R&D and Culinary