DDW: Caramelized Fruits and Vegetables
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Clean Label Goals

• Ingredients recognizable by consumers

• Ingredients with functionality

• Ingredients that fall within regulations
## Clean Label Ingredient Examples

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Label Declaration</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paprika (Spice)</td>
<td>Paprika</td>
<td>Color and Flavor</td>
</tr>
<tr>
<td>Malt Extract</td>
<td>Malt Extract</td>
<td>Color and Flavor</td>
</tr>
<tr>
<td>Tomato Juice</td>
<td>Tomato Juice Concentrate</td>
<td>Color and Flavor</td>
</tr>
<tr>
<td>Onion Powder</td>
<td>Onion Powder</td>
<td>Flavor</td>
</tr>
<tr>
<td>Molasses</td>
<td>Molasses</td>
<td>Color and Flavor</td>
</tr>
</tbody>
</table>
Enhanced Ingredients

• Caramelized Onions
  – Brown, Sweet, caramelized onion flavor with subdued green notes

• Caramelized Apples
  – Brown, Sweet, fruity flavor with a slight acidic notes
Minimally Processed

100% Fruit or Vegetable Juice Concentrate ➔ Cooking Process ➔ Cooked Fruit or Vegetable Juice Concentrate
DDW Caramelized Fruits

*Caramelized Apple* – A light, sweet apple note with a standardized color.

*Caramelized Pear* – A light, sweet fruity note with a standardized amber color.

Natural ingredient for a simple label

Excellent heat stability

Up to 25% salt stability

pH stability as low as 3 (2.5 in some applications)
DDW Caramelized Vegetables

Caramelized Savory Vegetable and Mirepoix—A caramelized aromatic blend of carrot and onion juices. Mirepoix adds celery. This base for cooking provides a standardized brown color.

Caramelized Onion – A caramelized aromatic yellow onion juice, imparts a rich, onion note with a standard color. (Powder & liquid available)

Caramelized Garlic – A caramelized aromatic garlic juice, imparts a rich, roasted garlic note with a standardized golden color.

Caramelized Tomato – A caramelized aromatic tomato juice with a rich, nutty, roasted tomato note. Available in two hues 822 (light) and 825 (dark).
Baking

Caramelized fruit & vegetable options

Ingredient labeling

Savory & sweet applications include bread, biscuits, frostings, & cake/muffin mixes

Rigorous application validation available

*Suggested usage range is between 0.40% to 0.80%*
Natural Ingredient for a simple label

Excellent heat stability

Up to 25% salt stability

pH stability as low as 3.0

Suggested usage range is between 0.10% and 0.60%.

Possible Snack Applications:
Chips, Fries, Popcorn, Coated Nuts, Crackers, Snack Mixes, Seasoned Potatoes
DDW’s caramelized fruits and vegetables create building blocks for flavor as well as providing a standardized, incidental color.

**Flavor Possibilities Include:**
- Caramelized Garlic – Aioli
- Caramelized Tomato – Sun-dried Tomato
- Caramelized Onion – Sweet Vidalia Onion
- Caramelized Savory Vegetables – Italian / Garden Veggie
- Caramelized Pear & Apple – Sweet Vinaigrettes

*Suggested usage range is between 0.25% and 0.50%.*
DDW’s caramelized vegetable options contribute flavor & an even color to broths and soups, such as tomato, roasted red pepper, & French onion.

Suggested usage range is between 0.10% and 0.20%.
Beverages

Caramelized tomato, onion, and garlic provide flavor notes to savory vegetable juice-based drinks.

Suggested usage range is between 0.10% and 0.50%.

DDW’s caramelized pear and apple can enhance flavored waters and ciders to prevent batch-to-batch color variation.
In ground meat, caramelized garlic or onion can add rich savory notes and reduce gray hues. In whole muscle chicken, Savory Vegetable can enhance marinades to evenly color the chicken and add a savory, umami flavor.

Suggested usage range is between 0.25% and 0.50%.
Labeling

• Cooked “vegetable or fruit common name” Juice Concentrate
  – Cooked Onion Juice Concentrate
  – Cooked Garlic Juice Concentrate
  – Cooked Apple Juice Concentrate
# Caramelized Fruits - Summary

<table>
<thead>
<tr>
<th>Sector</th>
<th>Application</th>
<th>Suggested Use Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakery</td>
<td>Frostings, Cake/Muffins, Breads, Fillings, Pastries, Biscuits</td>
<td>0.40% to 0.80%</td>
</tr>
<tr>
<td>Beverages</td>
<td>Enhanced Waters, Juice-Based Drinks, Ciders</td>
<td>0.10% to 0.50%</td>
</tr>
<tr>
<td>Dressings</td>
<td>Vinaigrettes</td>
<td>0.25% to 0.50%</td>
</tr>
<tr>
<td>Meats</td>
<td>Whole Meat Chicken, Black Forest Ham</td>
<td>0.25% to 0.50%</td>
</tr>
<tr>
<td>Sector</td>
<td>Application</td>
<td>Suggested Use Rate</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Bakery</td>
<td>Breads, Fillings, Pastries</td>
<td>0.40% to 0.80%</td>
</tr>
<tr>
<td>Beverages</td>
<td>Juice-Based Drinks</td>
<td>0.40% to 1.0%</td>
</tr>
<tr>
<td>Soups/Sauces</td>
<td>Broth/Stocks, Bisques, Cream-Based Soups</td>
<td>0.10% to 0.20%</td>
</tr>
<tr>
<td>Dressings</td>
<td>Cream-Based Dressings, Vinaigrettes</td>
<td>0.25% to 0.50%</td>
</tr>
<tr>
<td>Snack Coatings/Seasonings</td>
<td>Chips, Crisps, Popcorn, Seasoned Potatoes, Coated Nuts, Crackers</td>
<td>0.10% to 0.60%</td>
</tr>
<tr>
<td>Meats</td>
<td>Whole Meat Chicken</td>
<td>0.25% to 0.50%</td>
</tr>
</tbody>
</table>
Thank You