Buckwheat

The common buckwheat (Fagopyrum esculentum) plant is a pseudo-cereal grown for its unique ability to out-compete other plants for sun, soil, and water. It packs these nutrients into leaves, stems, flowers, and fruits. The fruits are a grain-like staple, but juice from the plant material is a perfect source for essential nutrients and bioactive compounds.

Phytoactives

Phytoactive compounds that promote antioxidant activity and promote vascular health
- **Rutin** (2.7 mg/g)**
- **Quercetin** (0.7 mg/g)**

Carotenoids

Antioxidants with anti-cancer potential and may lower risk of macular degeneration
- **Beta Carotene** (0.26 mg/g)**

Anthocyanidins

Purple and red pigments concentrated in buckwheat stems with strong antioxidant and anti-inflammatory activity
- **Cyanidin-3-galactoside** (0.11 mg/g)**
- **Cyanidin-3-glucoside** (0.05 mg/g)**
- **Cyanidin** (0.01 mg/g)**

Chlorophyll

Green pigment in plants with potential anti-inflammatory, antioxidant, and anti-bacterial activity
- **Anthocyanidins**
- **Beta Carotene** (52.26 mcg/g)**
- **Zeaxanthin** (6.0 mcg/g)**

Lutein (61.2 mcg/g)**
- **Beta Carotene** (0.1 mcg/g)**

Cyanidin-3-galactoside (11.1 mcg/g)**
- **Cyanidin-3-glucoside** (5.3 mcg/g)**
- **Cyanidin** (0.1 mcg/g)**

Phytoactives

What is the Whole Food Matrix?

- Supports balance immune modulation for healthy inflammatory response.
- Supports the gut microbiota and a healthy metabolic fingerprint of the gut.
- Benefits of nutrients food matrix enhances bioavailability by up to 60%.
- Organic and adaptive regenerative farming techniques deliver nutrient dense source of key phytonutrients and help balance healthy lifestyles.
- Increased intake of vegetables and fruits in whole food nutrition influences individual epigenetic expression of our health potential.

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Gallic Acid Equivalence

**What is GAE?**

GAE, or “gallic acid equivalence,” indicates levels of important phytoactives available in the plant and extracts. GAE is derived by comparing to the gallic acid reference standard, a simple phenolic substance. Studies have shown that phytoactives in plants contribute to their beneficial effect on development of chronic diseases.

Total Phenolic Concentration

<p>| Total Phoenolic Concentration Measured: Total Phenolics as Gallic Acid Equivalence (mg/g) |</p>
<table>
<thead>
<tr>
<th>White Buckwheat Juice Extract***</th>
<th>Lentils*</th>
<th>Caps*</th>
<th>Onions*</th>
<th>Dried Turmeric*</th>
<th>Black Elderberry*</th>
<th>Low Bush Blueberry*</th>
</tr>
</thead>
<tbody>
<tr>
<td>49.81</td>
<td>36.97</td>
<td>36.00</td>
<td>27.57</td>
<td>21.17</td>
<td>19.50</td>
<td>4.72</td>
</tr>
</tbody>
</table>

* Data is mean values from Phenol-Explorer Database
** Data on file with WholisticMatters
*** Values subject to change based on strain and experimental methods

Key Nutrients

- **Iron**: Essential mineral that is a component of hemoglobin required to aid the transport of oxygen through the body, and is a cofactor in many enzymes in the body required for normal function.
  - 33%

- **Magnesium**: An essential mineral that supports nerve and muscle function, the immune system, and a healthy heart.
  - 19%

- **Manganese**: Essential mineral incorporated in enzymes that metabolize macromolecules; helps protect mitochondria from oxidation and forms both collagen and cartilage.
  - 13%

- **Vitamin K**: Vital for blood clotting and healthy bones.
  - 11%

- **Potassium**: Nutrient supporting healthy blood pressure.
  - 7%

Other Nutrients

- Biotin (Vitamin B7)
- Copper
- Pantothentic acid (Vitamin B5)
- Nicin (Vitamin B3)
- Vitamin E (Alpha-tocopherol)
- Selenium
- Fiber
- Calcium
- Phosphorus
- Zinc
- Riboflavin (Vitamin B2)
- Folate (Vitamin B9)
- Pantothenic acid (Vitamin B5)
- Niacin (Vitamin B3)
- Copper
- Phosphorus
- Biotin (Vitamin B7)
- Folate (Vitamin B9)

We are dedicated to advancing the latest insights and information available in nutrition therapy and clinical nutrition and to presenting only the most balanced, credible, and reliable clinical nutrition and science available.

References

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