Turnip greens come from the leaves of root vegetable Brassica rapa subsp. rapa and are a particularly rich source of vitamins K, A, and C as well as plant form folate and phytoactive compound lutein. The dry leaves from turnips are also a rich source of glucosinolates and the activating enzyme myrosinase. Eating turnip greens and other vegetables improves your food quality score (FQS).

**Phytoactives**

- **Chlorophyll**: Green pigment in plants with potential anti-inflammatory, antioxidant, and anti-bacterial activity.
- **Myrosinase**: Enzyme found in plant tissue that initiates conversion of glucosinolates to bioactive isothiocyanates.
- **Glucosinolates**: Sulfur-containing secondary metabolites mostly found in cruciferous vegetables, when activated by myrosinase from the plant or after ingestion by gut bacteria, associated with positive effects stemming from antioxidant activity such as cardio-protection and detoxification support.

**What is the Whole Food Matrix?**

- Supports balance immune modulation for healthy inflammation response.
- Supports the gut microbiome and a healthy metabolic fingerprint of the gut.
- 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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Calcium
The most abundant mineral in the body, a key structure of bones, and component of muscle function, vascular contraction, nerve transmission, cellular signaling, and hormone secretion.

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
Measured: Total Phenolics as Gallic Acid Equivalence (mg/g)

<table>
<thead>
<tr>
<th>Plant</th>
<th>Total Phenolics as GAE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Turnip Greens**</td>
<td>16.93</td>
</tr>
<tr>
<td>Dry Parsley*</td>
<td>15.85</td>
</tr>
<tr>
<td>Red Swiss Chard Leaves*</td>
<td>13.20</td>
</tr>
<tr>
<td>White Swiss Chard Leaves*</td>
<td>8.30</td>
</tr>
<tr>
<td>Fennel Leaves*</td>
<td>4.51</td>
</tr>
<tr>
<td>Spinach Leaves*</td>
<td>3.84</td>
</tr>
<tr>
<td>Red Cabbage*</td>
<td>2.48</td>
</tr>
</tbody>
</table>

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

Key Nutrients
Percentages shown as %DV per dry serving of turnip greens (5.68g)

<table>
<thead>
<tr>
<th>Nutrient</th>
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</tr>
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<tbody>
<tr>
<td>Vitamin K</td>
<td>Vital for blood clotting and healthy bones.</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>A micro nutrient with antioxidant activity that supports the immune system and metabolism.</td>
</tr>
<tr>
<td>Calcium</td>
<td>The most abundant mineral in the body, a key structure of bones, and component of muscle function, vascular contraction, nerve transmission, cellular signaling, and hormone secretion.</td>
</tr>
<tr>
<td>Vitamin B6</td>
<td>A B vitamin that acts as a coenzyme in many biological functions and is a primary component of protein metabolism.</td>
</tr>
</tbody>
</table>

Other Nutrients
(in order of %DV per dry serving of turnip greens (5.68g))

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>%DV per dry serving of turnip greens (5.68g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manganese</td>
<td></td>
</tr>
<tr>
<td>Magnesium</td>
<td></td>
</tr>
<tr>
<td>Phosphoric acid (Vitamin B3)</td>
<td></td>
</tr>
<tr>
<td>Fiber</td>
<td></td>
</tr>
<tr>
<td>Zinc</td>
<td></td>
</tr>
<tr>
<td>Boron (Vitamin B3)</td>
<td>Choline</td>
</tr>
<tr>
<td>Potassium</td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td></td>
</tr>
<tr>
<td>Biotin (Vitamin B7)</td>
<td>Carbohydrate</td>
</tr>
<tr>
<td>Copper</td>
<td></td>
</tr>
<tr>
<td>Phosphorus</td>
<td></td>
</tr>
<tr>
<td>Pantothenic acid (Vitamin B5)</td>
<td></td>
</tr>
<tr>
<td>Zinc</td>
<td></td>
</tr>
<tr>
<td>Choline</td>
<td></td>
</tr>
<tr>
<td>Carbohydrate</td>
<td></td>
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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.

WholisticMatters.com

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References