Color of Food

PHYTOACTIVE & KEY NUTRIENT INSIGHTS

Understanding the phytoactive profiles of whole foods can help maximize quality of life. And with chronic conditions on the rise, recognizing the potency of whole foods is critical to evaluating which plants have high levels of phytoactives that can help minimize the development of chronic disease. This booklet uses gallic acid equivalence (GAE) and nutrient analysis to educate on the profiles of twelve top crops to showcase the elements used in the Whole Food Matrix.

What is Gallic Acid Equivalence?

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.

What is the Whole Food Matrix?

- *Supports balanced immune modulation for healthy inflammation response*
- *Supports gut microbes and a healthy metabolic fingerprint of the gut*
- *Enhances nutrient bioavailability up to 60%*
- *Includes organic and adaptive regenerative farming techniques that deliver a nutrient-dense source of key phytonutrients and help balance healthy lifestyles*
- *Increases intake of vegetables and fruits in whole food nutrition to influence individual epigenetic expression*

Alfalfa

The alfalfa plant *(Medicago sativa Linn.)* is grown for its unique blend of protein, B vitamins, and minerals. It is a perennial flowering legume widely grown across the world. The sprouts and whole plant material can be used to deliver essential nutrients and phytoactive compounds.

KEY NUTRIENTS

Percentages shown as %DV per serving of 5g alfalfa juice extract

28% MANGANESE
Essential mineral incorporated in enzymes that metabolize macronutrients; helps protect mitochondria from oxidation and forms both collagen and cartilage

27% BIOTIN
B vitamin necessary for energy metabolism, histone modification, gene regulation, and cell signaling

14% RIBOFLAVIN
Water-soluble vitamin vital for energy production, cell function, metabolism, and growth/ development

10% COPPER
Essential mineral required for proper usage of iron in the body, neurotransmissions, and maturation of connective tissues

8% PANTOTHENIC ACID
Water-soluble vitamin important for energy metabolism, enzyme activation, signal transduction, and biosynthesis of fats and cholesterol

Other Nutrients *In order of %DV per 5g alfalfa juice extract*

Magnesium • Calcium • Potassium • Iron • Thiamin • Vitamin B_6 • Niacin • Zinc • Selenium • Phosphorus • Choline • Fiber • Folate

PHYTOACTIVES

Flavones

Compounds with anti-inflammatory, antimicrobial, and anti-cancer activity

Adenosine
Apigenin
Luteolin

Chlorophyll

Green pigment in plants with potential anti-inflammatory, antioxidant, and anti-bacterial activity

Carotenoids

Antioxidants with anti-cancer potential and may lower risk of macular degeneration

Beta-carotene *(0.87 mg/g)**
Alpha-carotene *(0.06 mg/g)**
Beta Cryptoxanthin *(0.06 mg/g)**

Saponins

Support the immune system, healthy cholesterol levels, and blood glucose levels

Bayogenin
Foumononetin
Hederagenin
Medicagenic Acid
Soyasapogenol A
Soyasapogenol B
Soyasapogenol E
Soyasaponin I
Zahnic Acid

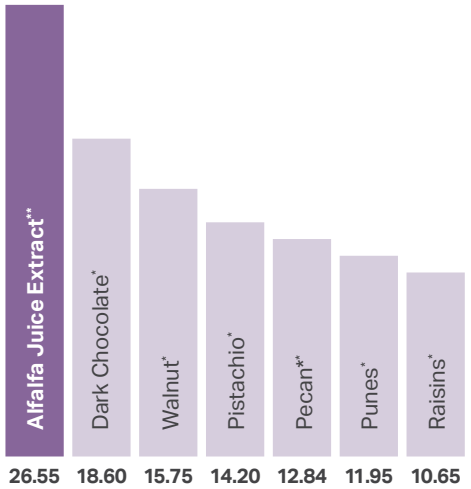
Flavonols

Promote antioxidant activity and vascular health

Quercetin *(17 mcg/g)**

Total Phenolic Concentration

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



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Values subject to change based on strain and experimental methods

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Barley Grass

Barley *(Hordeum vulgare)* is grown primarily for its cereal grain, but the grass portion of the plant provides a rich source of minerals and B vitamins, like riboflavin and biotin.

KEY NUTRIENTS

Percentages shown as %DV per serving of 5g barley grass extract

13%	13%	12%	11%	11%
RIBOFLAVIN	**BIOTIN**	**IRON**	**POTASSIUM**	**MANGANESE**
Water-soluble vitamin vital for energy production, cell function, metabolism, and growth/ development	*B vitamin necessary for energy metabolism, histone modification, gene regulation, and cell signaling*	*Used by the body to make red blood cells, hormones, and connective tissue*	*Nutrient supporting healthy blood pressure*	*Essential mineral incorporated in enzymes that metabolize macronutrients; helps protect mitochondria from oxidation and forms both collagen and cartilage*

Other Nutrients *In order of %DV per 5g barley grass extract*

Magnesium • Calcium • Folate • Copper • Vitamin B_6 • Phosphorus • Selenium • Niacin • Pantothenic acid • Choline • Zinc • Fiber • Thiamin

PHYTOACTIVES

Flavonols

Compounds with anti-inflammatory, antimicrobial, and anti-cancer activity

Lutonarin
Saponarin

Flavones

Compounds with anti-inflammatory, antimicrobial, and anti-cancer activity

Cynaroside
Isoorientin
Isovitexin
Luteolin
Luteolin-3-7-di-glucoside
Orientin
Vitexin

Chlorophyll

Green pigment in plants with potential anti-inflammatory, antioxidant, and anti-bacterial activity

Phenolic Acids

Compounds that promote anti-oxidant activity and vascular health

Chlorogenic Acid
Ferulic Acid

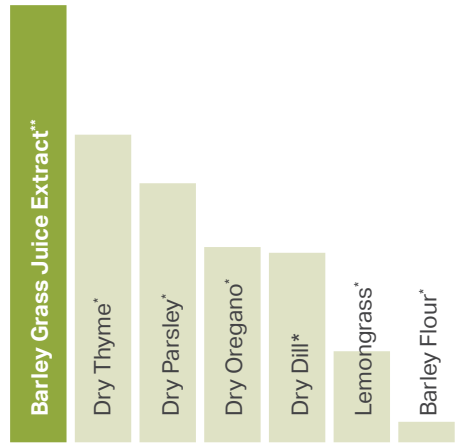
Fiber

Supports cardiovascular health, healthy bowel function, and healthy cholesterol levels

Arabinoxylan

Total Phenolic Concentration

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



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Beetroot

Red table beets *(Beta vulgaris var. rubra L.)* are the deep red root vegetable loaded with complex carbohydrates, unique phytoactive compounds, essential vitamins, and essential minerals.

KEY NUTRIENTS

Percentages shown as %DV per dry serving of 17g beetroot powder

17%	13%	13%	13%	11%
FOLATE	**COPPER**	**MANGANESE**	**FIBER**	**IRON**
An essential vitamin used in synthesis of DNA and RNA, amino acid metabolism, and prevention of neural tube defects	*Essential mineral required for proper usage of iron in the body, neurotransmissions, and maturation of connective tissues*	*Essential mineral incorporated in enzymes that metabolize macronutrients; helps protect mitochondria from oxidation and forms both collagen and cartilage*	*Promote healthy cholesterol levels, promote cardiovascular health, support healthy bowel function*	*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*

Other Nutrients *In order of %DV per dry serving of 17g beetroot powder*

Magnesium • Potassium • Pantothenic Acid • Riboflavin • Calcium • Zinc • Phosphorus • Selenium • Thiamin • Niacin • Vitamin B_6 • Choline

PHYTOACTIVES

Flavonols

Promote antioxidant activity and vascular health

Quercetin *(1.3 mcg/g)**

Nitrate

Supports exercise performance and cardiovascular health

Betalains

Natural pigments with antioxidant, anti-cancer, anti-lipidemic, and antimicrobial properties

Lignans

Cross-linked phenolic compounds that make up plant cell walls and are insoluble fibers that aid in fecal bulking and feed some gut bacteria

Secoisolariciresinol *(0.07 mcg/g)**

Fiber

Supports cardiovascular health, healthy bowel function, and healthy cholesterol levels

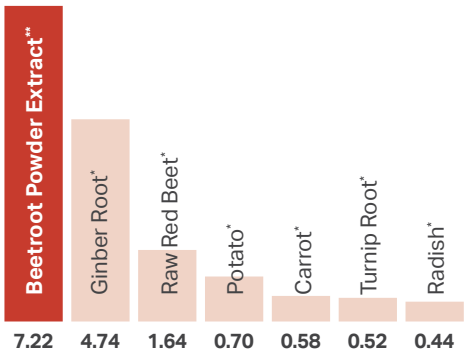
Flavones

Compounds with anti-inflammatory, antimicrobial, and anti-cancer activity

Luteolin *(3.7 mcg/g)**

Total Phenolic Concentration

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



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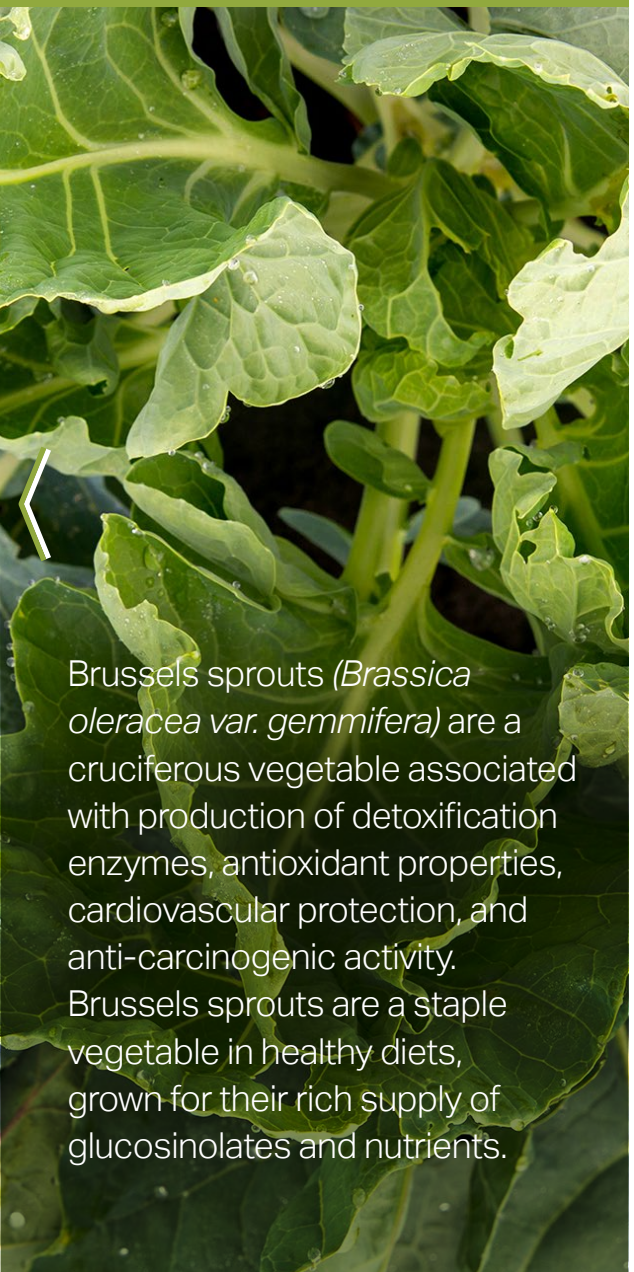
Brussels Sprouts



Brussels sprouts *(Brassica oleracea var. gemmifera)* are a cruciferous vegetable associated with production of detoxification enzymes, antioxidant properties, cardiovascular protection, and anti-carcinogenic activity. Brussels sprouts are a staple vegetable in healthy diets, grown for their rich supply of glucosinolates and nutrients.

KEY NUTRIENTS

Percentages shown as %DV per serving of 21.4g Brussels sprouts

64%

IRON

Used by the body to make red blood cells, hormones, and connective tissue

52%

VITAMIN K

Vital for blood clotting and healthy bones

37%

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

35%

SELENIUM

Essential trace mineral involved in reproduction, thyroid hormone metabolism, DNA synthesis, and protection from oxidative damage

29%

FIBER

Promote healthy cholesterol levels, promote cardiovascular health, support healthy bowel function

Other Nutrients *In order of %DV per 21.4g Brussels sprouts* Manganese • Magnesium • Folate • Potasium • Vitamin B_6 • Riboflavin • Vitamin C • Vitamin E • Niacin • Thiamin • Copper • Choline • Pantothenic acid • Phosphorus • Zinc • Beta-carotene

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

Glucobrassicin *(0.61 mg)***
Glucoiberin *(0.45 mg)***
Sinigrin *(0.37 mg)***
Progoitrin *(0.12 mg)***
Glucoraphasatin *(0.11 mg)***
Glucoraphanin *(0.10 mg)***
Gluconapin *(0.07 mg)***

Carotenoids

Antioxidants with anti-cancer potential and may lower risk of macular degeneration

Lutein *(11.8 mcg/g)***

Carotenoids

Beta-carotene *(30.2 mcg/g)***

Flavones

Compounds with anti-inflammatory, antimicrobial, and anti-cancer activity

Luteolin *(1.7 mcg/g)**

Flavonols

Promote antioxidant activity and vascular health

Kaempferol *(9.5 mcg/g)**
Quercetin *(3.0 mcg/g)**

Lignans

Large plant polyphenolic compounds that bypass human digestion, feed gut bacteria, and provide antioxidant activity

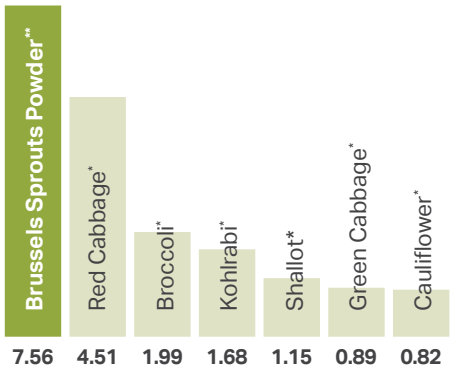
Lariciresinol *(493 mcg/g)**
Pinoresinol *(220 mcg/g)**
Secoisolariciresinol *(10.6 mcg/g)**

Fiber

Supports cardiovascular health, healthy bowel function, and healthy cholesterol levels

Total Phenolic Concentration

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



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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, and juice from the plant material contains essential nutrients and bioactive compounds.

KEY NUTRIENTS

Percentages shown as %DV per serving of 5g buckwheat juice extract

33%	19%	13%	11%	7%
IRON	**MAGNESIUM**	**MANGANESE**	**VITAMIN K**	**POTASSIUM**
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	*An essential mineral that supports nerve and muscle function, the immune system, and a healthy heart*	*Essential mineral incorporated in enzymes that metabolize macronutrients; helps protect mitochondria from oxidation and forms both collagen and cartilage*	*Vital for blood clotting and healthy bones*	*Nutrient supporting healthy blood pressure*

Other Nutrients *In order of %DV per 5g buckwheat juice extract:* Biotin • Riboflavin • Copper • Pantothenic acid • Niacin • Vitamin E • Selenium • Fiber • Calcium • Phosphorus • Zinc • Choline • Folate • Vitamin B_6 • Thiamin

PHYTOACTIVES

Flavonols

Promote antioxidant activity and vascular health

Rutin *(12 mcg/g)**
Quercetin *(17 mcg/g)**

Carotenoids

Antioxidants with anti-cancer potential and may lower risk of macular degeneration

Beta-carotene *(52.26 mg/g)**

Anthocyanidins

Purple and red pigments concentrated in buckwheat stems with strong antioxidant and anti-inflammatory activity

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

Chlorophyll

Green pigment in plants with potential anti-inflammatory, antioxidant, and anti-bacterial activity

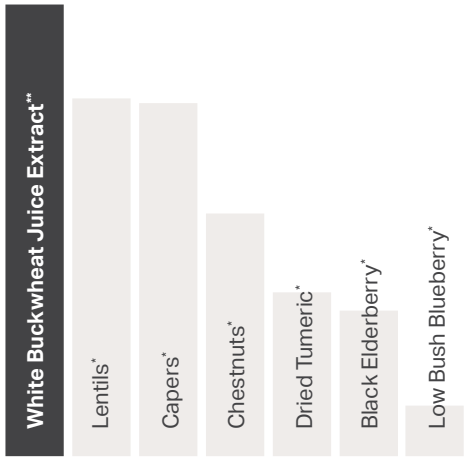
Carotenoids

Antioxidants with anti-cancer potential and may lower risk of macular degeneration

Lutein *(0.06 mg/g)**
Zeaxanthin *(0.06 mg/g)**

Total Phenolic Concentration

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



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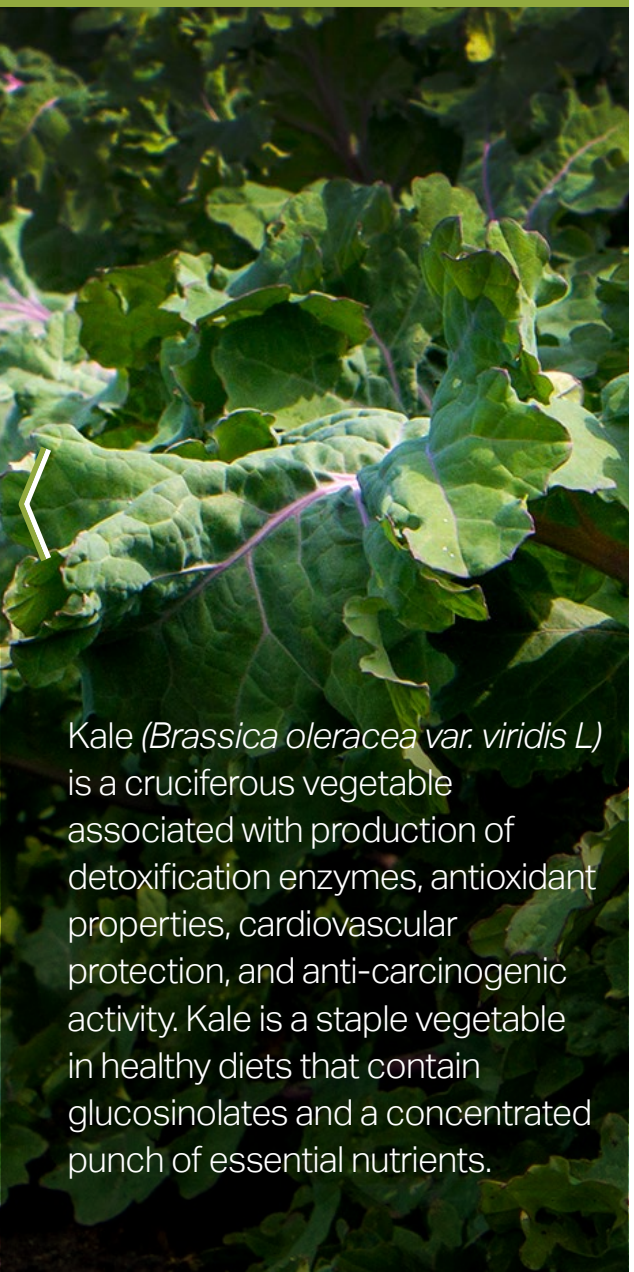
Kale



Kale *(Brassica oleracea var. viridis L)* is a cruciferous vegetable associated with production of detoxification enzymes, antioxidant properties, cardiovascular protection, and anti-carcinogenic activity. Kale is a staple vegetable in healthy diets that contain glucosinolates and a concentrated punch of essential nutrients.

KEY NUTRIENTS

Percentages shown as %DV per dry serving of 2.18g kale

47% IRON
Used by the body to make red blood cells, hormones, and connective tissue

13% VITAMIN K
Vital for blood clotting and healthy bones

10% MANGANESE
Essential mineral incorporated in enzymes that metabolize macronutrients; helps protect mitochondria from oxidation and forms both collagen and cartilage

4% 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

4% MAGNESIUM
Essential mineral that supports nerve and muscle function, the immune system, and a healthy heart

Other Nutrients *In order of %DV per dry serving of 2.18g kale*

Selenium • Copper • Fiber • Folate • Niacin • Potassium • Riboflavin • Thiamin • Vitamin B^6 • Phosphorus • Zinc • Choline • Pantothenic acid • Vitamin E

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

Gluconapin *(0.22454 mg)***
Glucoraphasatin *(0.0718 mg)***
Glucobrassicin *(0.03981 mg)***
4-MeOH Glucobrassicin *(0.02589 mg)***
Glucoerucin *(0.00298 mg)***
Neoglucobrassicin *(0.1153 mg)***
Glucoraphanin *(0.06072 mg)***
Glucobrassicanapin *(0.02884 mg)***
Sinigrin *(0.00356 mg)***

Carotenoids
Antioxidants with anti-cancer potential and may lower risk of macular degeneration

Lutein *(38.4 mcg/g)***

Carotenoids
Antioxidants with anti-cancer potential and may lower risk of macular degeneration

Beta-carotene *(4.626 mcg/g)***

Flavonols
Promote antioxidant activity and vascular health

Kaempferol *(267.4 mcg/g)**
Quercetin *(77.1 mcg/g)**

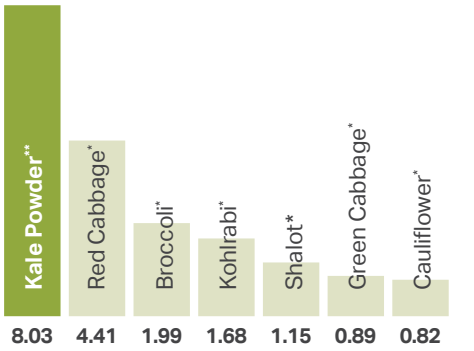
Fiber
Supports cardiovascular health, healthy bowel function, and healthy cholesterol levels

Lignans
Large plant polyphenolic compounds that bypass human digestion, feed gut bacteria, and provide antioxidant activity

Pinoresinol *(1.691 mcg/g)**
Lariciresinol *(0.599 mcg/g)**
Secoisolariciresinol *(0.019 mcg/g)**
Matairesinol *(0.012 mcg/g)**

Total Phenolic Concentration

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



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Kidney Beans

The material of the common bean *(Phaseolus vulgaris)* is rich with iron, magnesium, folate, fiber, and thiamin, among other macro- and micronutrients. The sprouts and full-grown plant contain ample amounts of essential minerals, various vitamins, and phenolic compounds.

KEY NUTRIENTS

Percentages shown as %DV per serving of 5g kidney bean juice extract

44%	18%	14%	13%	10%
IRON	**MAGNESIUM**	**RIBOFLAVIN**	**BIOTIN**	**CALCIUM**
Used by the body to make red blood cells, hormones, and connective tissue	*An essential mineral that supports nerve and muscle function, the immune system, and a healthy heart*	*Water-soluble vitamin vital for energy production, cell function, metabolism, and growth/ development*	*B vitamin necessary for energy metabolism, histone modification, gene regulation, and cell signaling*	*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*

Other Nutrients *In order of %DV per 5g kidney bean juice extract*

Copper • Manganese • Vitamin B_6 • Folate • Potassium • Niacin • Selenium • Choline • Pantothenic acid • Phosphorus • Zinc • Fiber • Thiamin

PHYTOACTIVES

Chlorophyll

Green pigment in plants with potential anti-inflammatory, antioxidant, and anti-bacterial activity

Flavonols

Promote antioxidant, anti-cancer, antimicrobial, and anti-inflamatory activity

Flavonols

Promote antioxidant activity and vascular health

Kaempferol-3-O-glucoside *(398.8 mcg/g)**
Quercetin-3-glucoronide2 *(286 mcg/g)**
Kaempferol-3-O-acetyl-glucoside *(164 mcg/g)**
Kaempferol-3-O-xylosyl-glucoside *(115 mcg/g)**
Kaempferol *(12.2 mcg/g)**
Quercetin *(6.8 mcg/g)**
Kaempferol-3-glycoside
Kaempferol-3-O-rutinoside
Quercetin-3-acetyl-glycoside
Quercetin-3-glycoside
Rutin

Isoflavanoids

Phenolic compounds with direct antioxidant effects

Genistein *(2.0 mcg/g)**

Lignans

Large plant polyphenolic compounds that bypass human digestion, feed gut bacteria, and provide antioxidant activity

Lariciresinol *(1.2 mcg/g)**
Secoisolariciresinol *(0.8 mcg/g)**
Pinoresinol *(0.3 mcg/g)**
Syringaresinol *(0.08 mcg/g)**

Phenolic Acids

Compounds that promote antioxidant activity and vascular health

Ferulic Acid *(128.4 mcg/g)**
Sinapic Acid *(51.7 mcg/g)**
p-Coumaric Acid *(38.1 mcg/g)**
Coumaroyl-malate
Feruroyl-malate

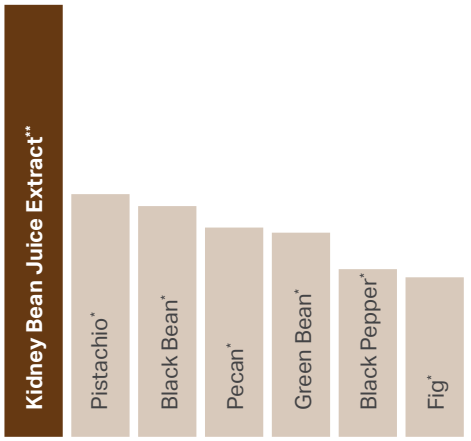
Saponins

Support the immune system, healthy cholesterol levels, and blood glucose levels

Bayogenin
Soyasaponin I
Soyasaponin V

Total Phenolic Concentration

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



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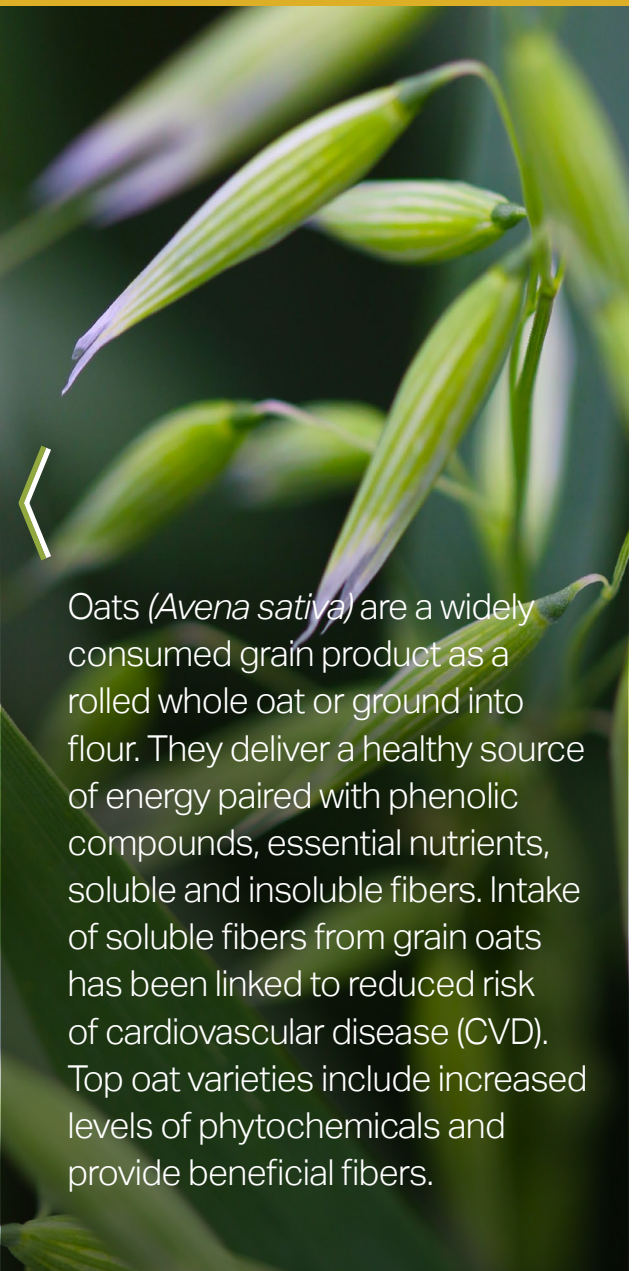
Oats



Oats *(Avena sativa)* are a widely consumed grain product as a rolled whole oat or ground into flour. They deliver a healthy source of energy paired with phenolic compounds, essential nutrients, soluble and insoluble fibers. Intake of soluble fibers from grain oats has been linked to reduced risk of cardiovascular disease (CVD). Top oat varieties include increased levels of phytochemicals and provide beneficial fibers.

KEY NUTRIENTS

Percentages shown as %DV per serving of 30g oats

42%	25%	16%	13%	10%
MANGANESE	**BIOTIN**	**COPPER**	**FIBER**	**PHOSPHORUS**
Essential mineral incorporated in enzymes that metabolize macronutrients; helps protect mitochondria from oxidation and forms both collagen and cartilage	*B vitamin necessary for energy metabolism, histone modification, gene regulation, and cell signaling*	*Essential mineral required for proper usage of iron in the body, neurotransmissions, and maturation of connective tissues*	*Promote healthy cholesterol levels, promote cardiovascular health, support healthy bowel function*	*A mineral component of bones and teeth, also involved in protein formation, cell repair, contractions, nerve signaling, and a part of ATP molecules that store energy in the body*

Other Nutrients *In order of %DV per 30g oats*

Cholene • Magnesium • Zinc • Potassium • Selenium • Pantothenic acid • Vitamin B_6 • Vitamin E • Vitamin K • Folate • Calcium

PHYTOACTIVES

Fiber

Supports cardiovascular health, healthy bowel function, and healthy cholesterol levels

Beta-glucan *(56 mcg/g)** The main soluble fiber in oats connected to reduced CVD risk*

- Arabinoxylan
- Type 1 Resistant Starch

Lignans

Large plant polyphenolic compounds that bypass human digestion, feed gut bacteria, and provide antioxidant activity

Syringaresinol *(3.5 mcg/100g)**
Lariciresinol *(1.8 mcg/100g)**
Matairesinol *(0.7 mcg/100g)**
Medioresinol *(0.4 mcg/100g)**
Secoisolariciresinol *(0.1 mcg/100g)**
Pinoresinol *(0.08 mcg/100g)**

Flavanones

Colorless flavonoid compounds with antioxidant activity

Neohesperidin *(6.2 mcg/g)**

Phenolic Acids

Phytoactive compounds that promote antioxidant activity and vascular health

4-Hydrobenzoic Acid *(4.5 mcg/g)**
Vanillic Acid *(2.7 mcg/100g)**
Ferulic Acid *(1.9 mcg/100g)**
p-Coumaric Acid *(1.6 mcg/100g)**
Hydrobenzaldehyde *(1.2 mcg/100g)**
Sinapic Acid *(0.4 mcg/100g)**

Avenanthramides (AV)

Phenolic acids exclusive to oats with antioxidant and anti-inflammatory activities and a bitter perception

Avenanthramide C *(49.24 mcg/g)**
Avenanthramide B *(31.85 mcg/g)**
Avenanthramide A *(31.67 mcg/g)**
Avenanthramide E *(0.15 mcg/g)**

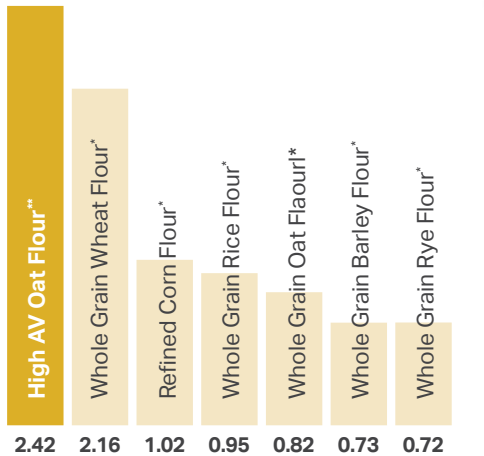
Saponins

Support the immune system, healthy cholesterol levels, and blood glucose levels

Avenacoside A
Avenacoside B

Total Phenolic Concentration

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



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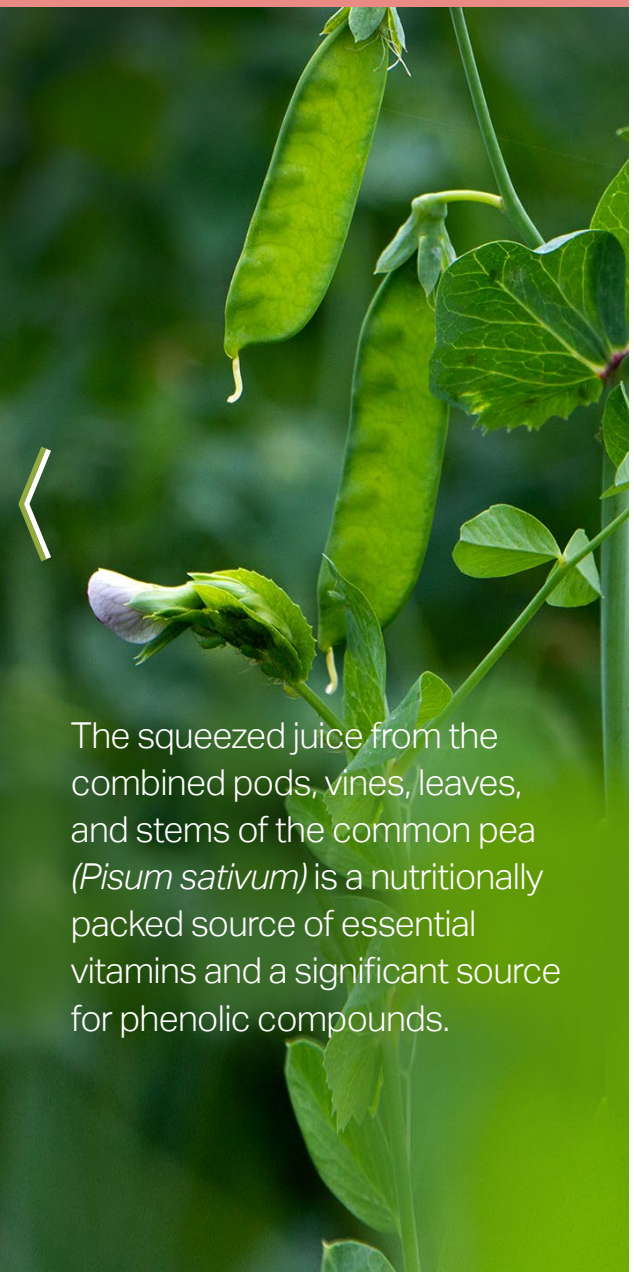
Peavine



The squeezed juice from the combined pods, vines, leaves, and stems of the common pea *(Pisum sativum)* is a nutritionally packed source of essential vitamins and a significant source for phenolic compounds.

KEY NUTRIENTS

Percentages shown as %DV per serving of 5g peavine juice extract

16% VITAMIN E

A micronutrient with antioxidant activity that supports the immune system and metabolism

13% VITAMIN K

Vital for blood clotting and healthy bones

11% BIOTIN

B vitamin necessary for energy metabolism, histone modification, gene regulation, and cell signaling

10% RIBOFLAVIN

Water-soluble vitamin vital for energy production, cell function, metabolism, and growth/development

7% MAGNESIUM

An essential mineral that supports nerve and muscle function, the immune system, and a healthy heart

Other Nutrients *In order of %DV per 5g peavine juice extract:* Copper • Vitamin B_6 • Iron • Folate • Calcium • Selenium • Niacin Manganese • Potassium • Pantothenic acid • Zinc • Phosphorus • Choline • Fiber • Thiamin

PHYTOACTIVES

Lignans

Large plant polyphenolic compounds that bypass human digestion, feed gut bacteria, and provide antioxidant activity

Lariciresinol *(0.5 mcg/g)**
Pinoresinol *(0.07 mcg/g)**
Syringaresinol *(0.04 mcg/g)**
Medioresinol *(0.035 mcg/g)**
Secoisolariciresinol *(0.00756 mcg/g)**

Chlorophyll

Green pigment in plants with potential anti-inflammatory, antioxidant, and anti-bacterial activity

Carotenoids

Antioxidants with anti-cancer potential and may lower risk of macular degeneration

Lutein *(7.22 mcg/g)***
Zeaxanthin *(0.39 mcg/g)***

Flavonols

Promote antioxidant, anti-cancer, and anti-inflamatory activity

Catechin *(0.1 mcg/g)**
Epicatechin *(0.1 mcg/g)**
Epigallocatechin
Gallocatechin

Flavonols

Promote antioxidant activity and vascular health

Kaempferol
Quercetin

Phenolic Acid

Compounds that promote antioxidant activity and vascular health

Sinapoyl-glucoside

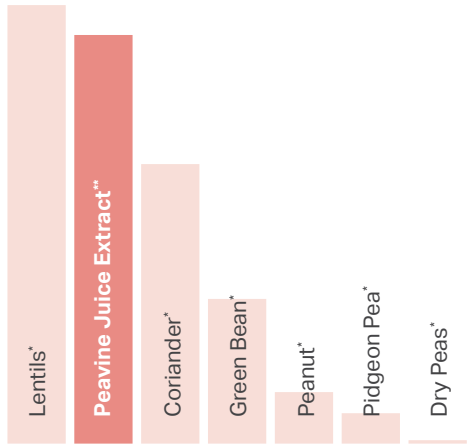
Saponins

Support the immune system, healthy cholesterol levels, and blood glucose levels

Soyasaponin I
Soyasaponin ßg

Total Phenolic Concentration

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



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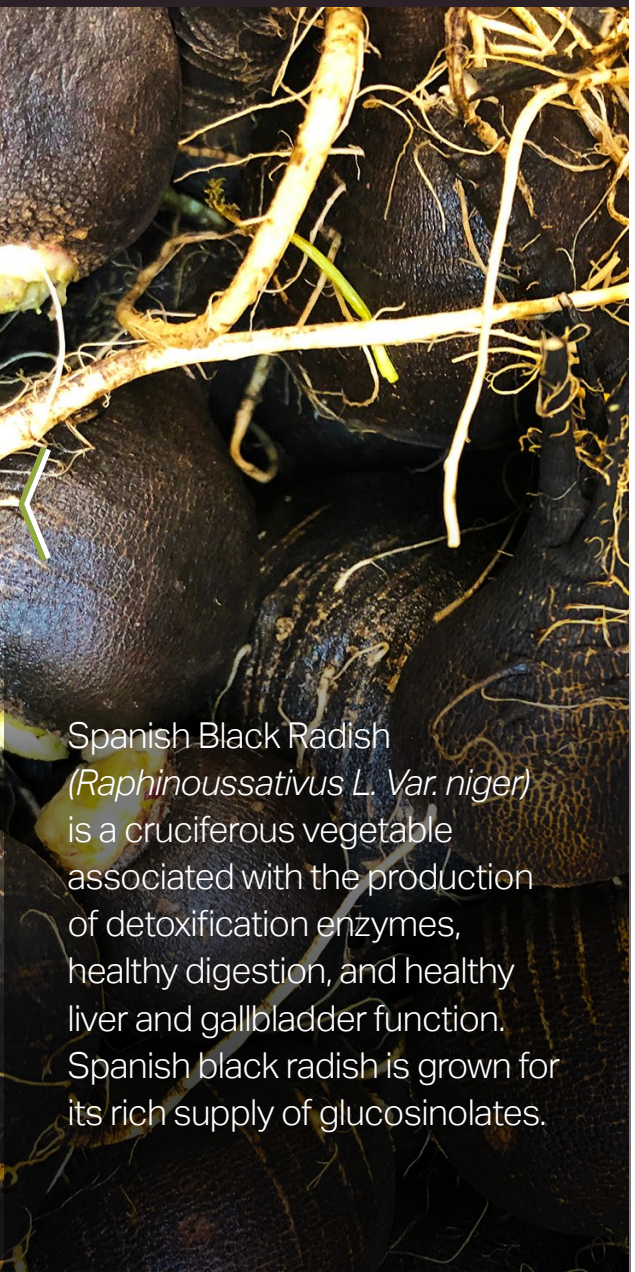
Spanish Black Radish



Spanish Black Radish *(Raphinoussativus L. Var. niger)* is a cruciferous vegetable associated with the production of detoxification enzymes, healthy digestion, and healthy liver and gallbladder function. Spanish black radish is grown for its rich supply of glucosinolates.

KEY NUTRIENTS

Percentages shown as %DV per serving of 5.5g Spanish black radish

15%	6%	4%	3%	3%
COPPER	**FIBER**	**SELENIUM**	**POTASSIUM**	**FOLATE**
Essential mineral required for proper usage of iron in the body, neurotransmissions, and maturation of connective tissues	*Promote healthy cholesterol levels, promote cardiovascular health, support healthy bowel function*	*Essential trace mineral involved in reproduction, thyroid hormone metabolism, DNA synthesis, and protection from oxidative damage*	*Nutrient supporting healthy blood pressure*	*An essential vitamin used in synthesis of DNA and RNA, amino acid metabolism, and prevention of neural tube defects*

Other Nutrients *In order of %DV per 5.5g Spanish black radish*

Calcium • Magnesium • Manganese • Biotin • Zinc • Choline • Phosphorus • Pantothenic acid • Vitamin B_6

PHYTOACTIVES

Fiber
Supports cardiovascular health, healthy bowel function, and healthy cholesterol levels

Myrosinase
Enzyme found in plant tissue that initiates conversion of glucosinolates to bioactive isothiocyanates

Tannins
Large set of diverse phenolic compounds found in plants that contribute to antioxidant activity, antimicrobial action, and distinct dark color

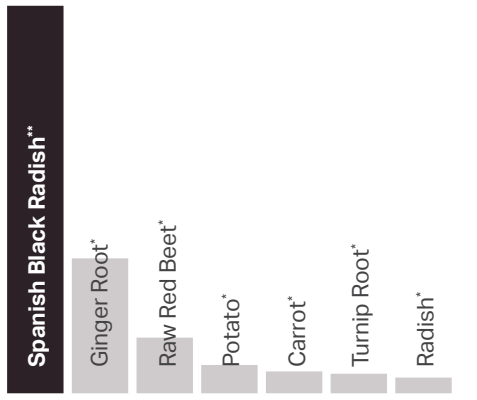
Saponins
Compounds that support the immune system, healthy cholesterol levels, and blood glucose levels

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

- Glucobrassicin *(11.835 mg/g)***
- Sinigrin *(0.215 mg/g)***
- Gluconapin *(0.2 mg/g)***
- Glucoraphanin *(0.12 mg/g)***
- Glucoerucin *(0.095 mg/g)***
- Glucobrassicin *(0.082 mg/g)***
- Glucobrassicanapin *(0.058 mg/g)***
- Glucoraphenin *(0.004 mg/g)***
- Neoglucobrassicin *(0.002 mg/g)***
- 4-MeOH Glucobrassicin *(0.002 mg/g)***

Total Phenolic Concentration

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



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Swiss Chard

Dark leafy greens with vibrantly colored stems and veins are trademark features of Swiss chard *(Beta vulgaris subsp. cicla)*. This plant is a mineral delivery powerhouse.

KEY NUTRIENTS

Percentages shown as %DV per serving of 5g dry Swiss chard extract

109%	44%	19%	18%	11%
VITAMIN K	**IRON**	**MAGNESIUM**	**SELENIUM**	**POTASSIUM**
Vital for blood clotting and healthy bones	*Used by the body to make red blood cells, hormones, and connective tissue*	*An essential mineral that supports nerve and muscle function, the immune system, and a healthy heart*	*Essential trace mineral involved in reproduction, thyroid hormone metabolism, DNA synthesis, and protection from oxidative damage*	*Nutrient supporting healthy blood pressure*

Other Nutrients *In order of %DV per 5g dry Swiss chard extract:* Riboflavin • Copper • Manganese • Biotin • Vitamin E • Zinc • Pantothenic acid • Folate • Calcium • Niacin • Fiber • Phosphorus • Choline • Vitamin B_6 • Thiamin

PHYTOACTIVES

Lignans

Cross-linked phenolic compounds that make up plant cell walls and are insoluble fibers that aid in fecal bulking and feed some gut bacteria

Secoisolariciresinol *(0.07 mcg/g)**

Chlorophyll

Green pigment in plants with potential anti-inflammatory, antioxidant, and anti-bacterial activity

Carotenoids

Antioxidants with anti-cancer potential and may lower risk of macular degeneration

Lutein *(1.45 mg/g)***
Zeaxanthin *(10.6 mg/g)***

Carotenoids

Beta-carotene *(52.26 mg/g)***

Flavonols

Promote antioxidant activity and vascular health

Kaempferol *(92 mcg/g)**
Quercetin *(75 mcg/g)**
Myricetin *(22 mcg/g)**

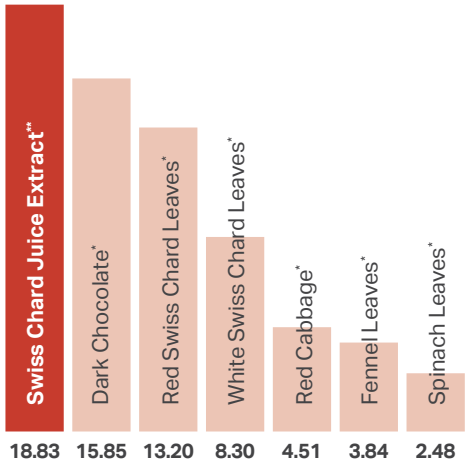
Betalains

Natural pigments with antioxidant, anti-cancer, anti-lipidemic, and antimicrobial properties

Betacyanins
Betaxanthins

Total Phenolic Concentration

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



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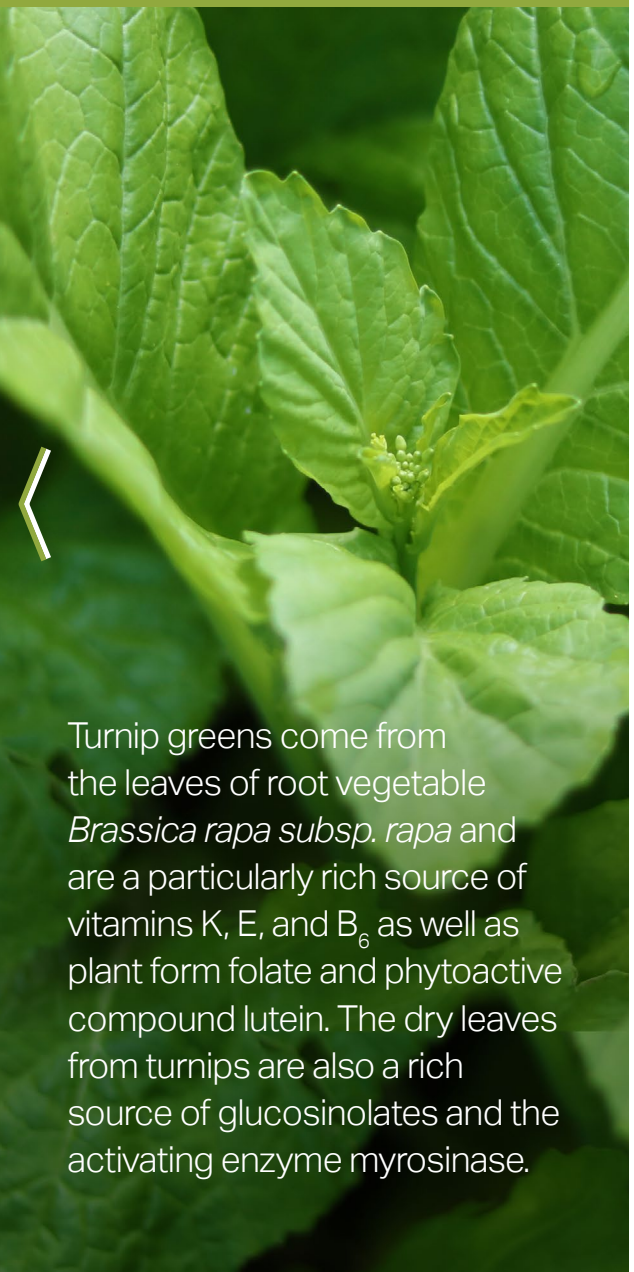
Turnip Greens



Turnip greens come from the leaves of root vegetable *Brassica rapa subsp. rapa* and are a particularly rich source of vitamins K, E, and B_6 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.

KEY NUTRIENTS

Percentages shown as %DV per serving of 5.68g turnip greens

23%	21%	12%	10%	9%
VITAMIN K	**FOLATE**	**VITAMIN E**	**CALCIUM**	**VITAMIN B_6**
Vital for blood clotting and healthy bones	*An essential vitamin used used in synthesis of DNA and RNA, amino acid metabolism, and prevention of neural tube defects*	*A micronutrient with antioxidant activity that supports the immune system and metabolism*	*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*	*B vitamin that acts as a coenzyme in many biological functions and is a primary component of protein metabolism*

Other Nutrients *In order of %DV per 5.68g turnip greens*

Manganese • Magnesium • Fiber • Biotin • Potassium • Copper • Phosphorus • Pantothenic acid • Zinc • Choline • Selenium

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

Other Glucosinolates *(4.12 mg/g)***
Neoglucobrassicin *(1.74mg/g)***
Glucoraphasatin *(1.2 mg/g)***
Glucobrassicanapin *(1.06 mg/g)***

Carotenoids

Antioxidants with anti-cancer potential and may lower risk of macular degeneration

Beta-carotene *(220.8 mcg/g)***

Flavonols

Promote antioxidant activity and vascular health

Kaempferol *(31.7 mcg/g)**
Quercetin *(4.9 mcg/g)**

Phenolic Acids

Phytoactive compounds that promote anti-oxidant activity and vascular health

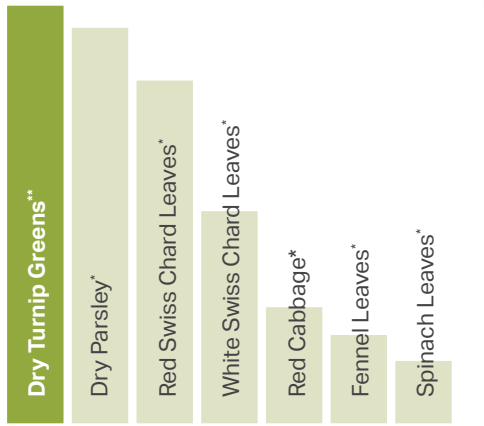
Caffeic Acid *(29.5 mcg/g)**
Gallic Acid *(23.1 mcg/g)**
Ferulic Acid *(6.0 mcg/g)**
Protocatechuic Acid *(6.0 mcg/g)**

Ellagic Acid

Potential antioxidant compound with anti-cancer potential

Total Phenolic Concentration

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



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