

# ALFALEFA



## 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.



## Phytoactives

### Flavones

Promote antioxidant, anticancer, antimicrobial, and anti-inflammatory activity

**Adenosine**<sup>1</sup>  
**Apigenin**<sup>1</sup>  
**Luteolin**<sup>1</sup>

### Chlorophyll

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

### Saponins

<sup>2</sup>

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

**Bayogenin**<sup>3</sup>  
**Foumononetin**<sup>3</sup>  
**Hederagenin**<sup>3</sup>  
**Medicagenic Acid**<sup>3</sup>  
**Soyasapogenol A**<sup>3</sup>  
**Soyasapogenol B**<sup>3</sup>  
**Soyasapogenol E**<sup>3</sup>  
**Soyasaponin I**<sup>3</sup>  
**Zahnic Acid**<sup>3</sup>

### Flavonols

Promote antioxidant activity and promote vascular health

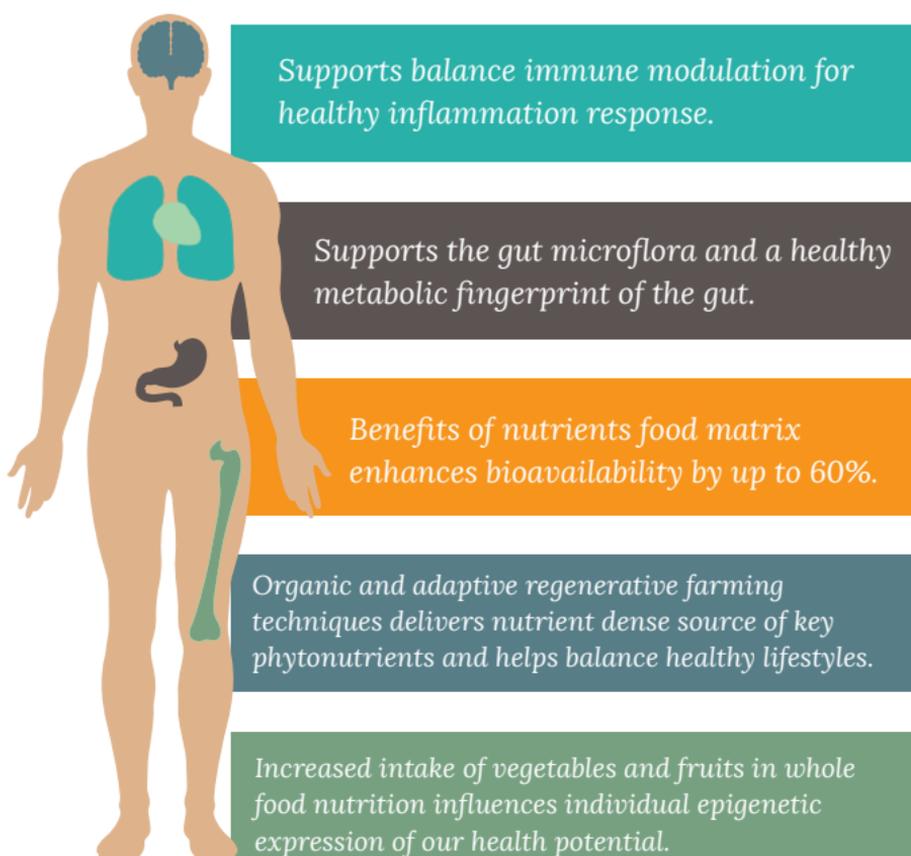
**Quercetin** (17 mcg/g)\*

### 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)\*

## What is the Whole Food Matrix?





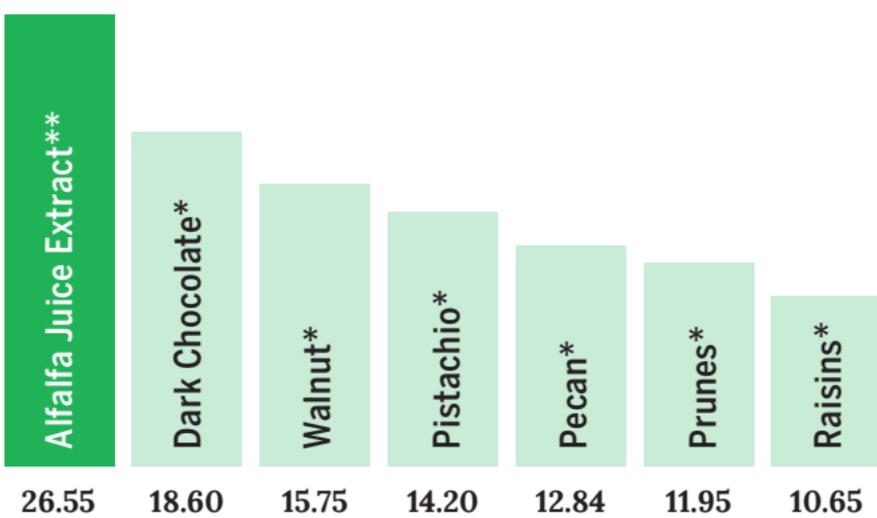
## Gallic Acid Equivalence

### 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)



\* Data is mean values from Phenol-Explorer Database<sup>1</sup>

\*\* Data on file with WholisticMatters

Values subject to change based on strain and experimental methods

## Key Nutrients

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

### Manganese

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

28%

### Biotin

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

27%

### Riboflavin

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

14%

### Copper

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

10%

### Pantothenic Acid

Water-soluble vitamin important for energy metabolism, enzyme activation, signal transduction, and biosynthesis of fats and cholesterol.

8%

## Other Nutrients

(in order of %DV per 5g alfalfa juice extract)

Magnesium

Calcium

Potassium

Iron

Thiamin (Vitamin B1)

Vitamin B6 (Pyridoxal

5'-phosphate)

Protein

Niacin (Vitamin B3)

Zinc

Selenium

Phosphorus

Choline

Fiber

Folate (Vitamin B9)

Lipids

Carbohydrate



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## References

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