# SPANISH BLACK RADISH

Wholistic Matters®

### Spanish Black Radish (SBR)

improves your food quality score

Spanish Black Radish (SBR; Raphinoussativus L. Var. niger) is a cruciferous vegetable associated with production of detoxification enzymes, healthy digestion, and healthy liver and gallbladder function. SBR is grown for its rich supply of glucosinolates, mainly glucoraphasatin and glucoraphanin. Eating SBR and other vegetables

(FQS).

# **Phytoactives**

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

#### 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

Sinigrin (0.215 mg/g)\*\*

GlucoRaphanin (0.12 mg/g)\*\* GlucoErucin (0.095 mg/g)\*\*

GlucoRaphasatin (11.835 mg/g)\*\* GlucoRaphenin (0.004 mg/g)\*\* GlucoBrassicin (0.082 mg/g)\*\*

GlucoNapin (0.2 mg/g)\*\*

Neoglucobrassicin (0.002 mg/g)\*\*

GlucoBrassicanapin (0.058 mg/g)\*

4-MeOH GlucoBrassicin (0.002 mg/g)\*\*

#### **Tannins**

Large set of diverse phenolic compounds found in plants that contribute to antioxidant activity, antimicrobial action and distinct dark color1

## Saponins

Phytoactive compounds that support the immune system and promote healthy cholesterol and blood glucose levels<sup>1</sup>

## What is the Whole Food Matrix?



Supports the gut microflora and a healthy metabolic fingerprint of the gut.

Organic and adaptive regenerative farming techniques delivers nutrient dense source of key phytonutrients and helps balance healthy lifestyles.

Increased intake of vegetables and fruits in whole food nutrition influences individual epigenetic expression of our health potential.



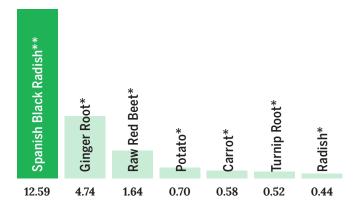
# Gallic Acid Equivalence

#### 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)



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

Values subject to change based on strain and experimental methods

# **Key Nutrients**

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

#### Copper

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



# **Fiber**

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



#### Selenium

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



#### **Potassium**



#### Folate (Vitamin B9)

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 Protein Magnesium Phosphorus

Manganese Pantothenic acid (Vitamin B5)

Vitamin B6 (Pyridoxal-5'-Carbohydrate Biotin (Vitamin B7) phosphate)

Lipids Zinc

Choline



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.

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- References Janjua, S. and M. Shahid, Phytochemical analysis and in vitro antibacterial activity of root peel extract of Raphanus sativus L. var niger. Advancement in Medicinal Plant Research,
- Rothwell, J.A., et al., Phenol-Explorer 3.0: a major update of the Phenol-Explorer database to incorporate data on the effects of food processing on polyphenol content. Database, 2013. 2013: p. bat070-bat070.

<sup>\*\*</sup> Data on file with WholisticMatters