



# 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.

## 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**

### Ligans

*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)\*

### Phenolic Acids

*Phytoactive compounds that promote antioxidant activity and vascular health*

**4-Hydroxybenzoic Acid** (4.5 mcg/g)\*  
**Vanillic Acid** (2.7 mcg/100g)\*  
**Ferulic Acid** (1.9 mcg/100g)\*  
**p-Coumaric Acid** (1.6 mcg/100g)\*  
**Hydroxybenzaldehyde** (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

*Some saponins found exclusively in oats are emerging as having bioactivity against growth of cancer cells in vitro*

**Avenacoside A**  
**Avenacoside B**

### Flavanones

*Colorless flavonoid compounds with antioxidant activity*

**Neohesperidin** (6.2 mcg/g)\*\*

## 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*

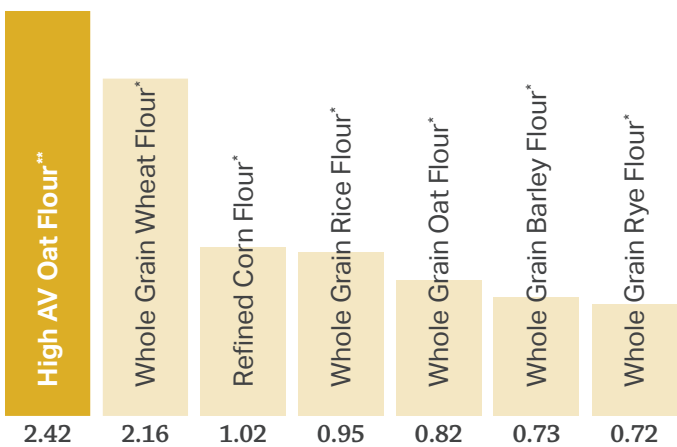
*Increases intake of vegetables and fruits in whole food nutrition to influence individual epigenetic expression*

## 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.

## 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 serving of 30g oats

42%

### MANGANESE

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

### BIOTIN

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

25%

16%

### 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, and support healthy bowel function

13%

10%

### PHOSPHORUS

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

- Choline
- Magnesium
- Zinc
- Potassium
- Selenium
- Pantothenic acid
- Vitamin B<sub>6</sub>
- Vitamin E
- Vitamin K
- Folate
- Calcium



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

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