

# Heavy Metals

An Informational Guide

Microgram (mcg) 1/1000<sup>th</sup> of a milligram Parts Per Million

GV
Guideline Value
Tolerance
levels set by
the FDA/FU

GV

6%

2.8%

GV

2.1%

4.7%

1.9%

GV

9.4%

3.3%

GV

9.7%

2.9%

2%

GV

5.2%

0%

GV

5%

6.5%

GV

3.4%

2.9%

GV

4.7%

1.5%

3.2%

GV

2%

4.7%

GV

10.5%

2.6%

1.2%

12.02 17.2%

10.21 13.6%

59.42 84.9%

12.02 17.2%

mcg 4.54

4.2

mcg

1.59

3.29

2.83

mcg

7.03

4.88

mcg

7.26

2.04

2.95

mcg

1.02

3.63

0

mcg 3.74

9.75

mcg

2.38

4.31

mcg

3.52

1.02

4.76

mcg

1.47

3.29

mcg

7.94

1.81

1.81

Lead

**Brussel Sprouts** 

Cadmium

Arsenic

163.63 110%

Heavy metals are in everything grown in soil. These metals naturally exist in the earth's crust, in our air, and in our water. They appear frequently in foods that require more water, like brown rice, root vegetables, and greens. They are unavoidable, but the body does and amazing job removing these minute amounts, especially the safer, organic forms that exist in plants.

That said, Sunwarrior and other leading health advocates are seeking higher standards from farmers and suppliers to reduce the heavy metals that naturally are more prevalent in certain foods. Together, we can create change in the way food is grown, improving ingredients from the source. We will never be able to fully eradicate heavy metals, but we can make things a little safer for all of us.

Sunwarrior products follow a high standard and we work to raise that standard even higher every day. Our rice protein falls well below FDA, WHO, and EU guidelines in test after test. Our products are, always have been, and always will be safe for anyone and any lifestyle. They are USDA Certified Organic (no herbicides or pesticides) and are Non-GMO Project Verified, as well. If you are still concerned with rice, make the switch to Warrior Blend, which doesn't contain any rice protein and consistently tests far lower across the board

#### FDA & EU Guidelines

Lead75 mcg per day (FDA)Cadmium70 mcg per day (EU)Arsenic150 mcg per day (EU)TungstenNo regulatory standard

#### **Vegetable & Food Levels**

per 4 oz serving

In 2007, the FDA released a report called *Total Diet Study Statistics on Element Results*. The report summarized the levels of certain heavy metals found in a variety of food. Some of the results are provided below. This helps to put the numbers in context.







The more processed a food, the less heavy metals it contains.

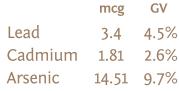
These are removed along with the nutrients, minerals, vitamins, antioxidants, and enzymes that make living foods great. Processed foods—like sodas, candies, refined carbs, and even bacon—appear healthier when looking at heavy metal content alone, but appearances can be deceiving.

Whole foods will always naturally contain some heavy metals.



	mcg	G۷
Lead	2.61	3.5%
Cadmium	.34	.5%
Arsenic	4.99	3.3%







	mcg	GV
Lead	1.93	2.6%
Cadmium	7.37	10.5%
Arsenic	1.25	0.8%



Lead	3.4	4.5%
Cadmium	.79	1.1%
Arsenic	2.83	1.9%

mcg

**GV** 

## Mr. Organic

### Inorganic



Many metals—even arsenic, cadmium, and tungsten—combine with molecules within plants to form organic metals, often called chelates. The organic forms of arsenic and cadmium are less reactionary, far less dangerous, and often even completely neutral. The body easily dispatches these.

Inorganic metals come from pollutants and industrial contamination. These are the dangerous ones we need to worry about. Studies estimate that only 10% of the heavy metals in our foods are the more toxic inorganic forms.

A		mcg	GV
	Lead	1.59	2.1%
	Cadmium	15.76	22.5%
Asparagus	Arsenic	0	0%
		mcg	GV
	Lead	1.36	1.8%
and the	Cadmium	10.66	15.2%
Celery	Arsenic	0	0%
-			
		mcg	GV
	Lead	1.81	2.4%
	Cadmium	74.5	106%
Sunflower Seeds	Arsenic	0	0%
		mcg	GV
	Lead	1.81	2.4%
	Cadmium	1.81	2.6%
Mushrooms	Arsenic	23.02	15.3%
4		mcg	GV
-	Lead	1.93	2.5%

Cadmium

Cadmium

Arsenic

Arsenic

Lead

**Carrots** 

**Beets** 

7.71

4.88

mcg

3.52

6.69

1.7

GV 2.5% 11% 3.2%	Lettuce	Lead Cadmium Arsenic	mcg 2.04 30.5 1.47	GV 2.7% 43.5% 0.9%
GV	. 40		mcg	GV
4.7%		Lead	3.74	5%
9.5%		Cadmium	9.19	13.1%
1.1%	<b>Baby Carrots</b>	Arsenic	1.81	1.2%

Avocados	Lead Cadmium Arsenic
Cantaloupe	Lead Cadmium Arsenic
Spinach	Lead Cadmium Arsenic
Sweet Potato	Lead Cadmium Arsenic
Tomatoes	Lead Cadmium Arsenic
Peanut Butter	Lead Cadmium Arsenic
Mixed Nuts	Lead Cadmium Arsenic
Raisins	Lead Cadmium Arsenic
Tuna	Lead Cadmium Arsenic