

Oxalate Fact Sheet

What are Oxalates?

Oxalates are naturally occurring organic acids found in a variety of foods, from fungus and they can be naturally generated via metabolic processes in the body as well. They are very reactive, and can bind to calcium and other minerals, inhibiting their absorption, while forming irritating crystals which can hinder enzyme function and further damage cellular tissue.

While many people can adequately handle oxalates via the gut microbiome or excretion, oxalates may be particularly problematic for those with intestinal permeability, known as “leaky gut.”

Symptoms of an oxalate overload in the body may include:

- kidney stones
- weakness
- nausea
- burning of the mouth or throat
- muscle pain in fibromyalgia
- digestive distress
- convulsions
- and coma among others.

If you decide to try a low oxalate diet (considered between 40-60 mg per day), **it is recommended to slowly reduce your oxalate intake by 10-20% each week.** Keep in mind that reducing oxalates too quickly may lead to detoxification symptoms.

For more information on oxalates, see: www.lowoxalate.info

Avoiding oxalates in food

Oxalates in plant foods are formed as a natural defence mechanism to protect themselves from being eaten by pests and bugs who are able to detect high oxalate levels and leave that food alone. Humans on the other hand can't sense oxalate content! Per serve, the highest oxalate foods are:

- spinach & beets
- berries
- chocolate
- peanuts, cashews, pecans, almonds
- wheat bran
- instant coffee & black tea

Meat, fish, shellfish, poultry, eggs, dairy products, white rice, white bread are low in oxalates.



Oxalate content of food

Fruits

Low

Apple (peeled)
Apricot
Banana
Cherries
Grapefruit
Cranberry
Grapefruit
Grapes (green)
Lychee
Lemon
Mango
Melon
Nectarine
Peach
Papaya
Passion fruit
Plum
Watermelon
Melons

Moderate

Pear
Persimmon
Coconut
Pineapple
Dates
Orange
Figs
Prunes
Grapefruit
Raisins
Strawberries

High

Blackberries
Blueberries
Kiwi
Currants
Elderberry
Orange peel
Lemon peel
Lime peel
Plantain
Pomegranate
Raspberries
Rhubarb
Tamarillo

Meat + Dairy

Low

All Meat, fish (except sardines-Med), shellfish, poultry, eggs and dairy products are low in oxalates.

Oxalate content of food

Vegetables

Low

Alfalfa
Avocado
Arugula/Rocket
Bock Choy
Bamboo Shoots
Cucumber
Cabbage
Red Capsicum
Cauliflower
Endive
Kohlrabi
Mushrooms
Red peppers
Peas
Radish
Water Chestnut
Squash
Turnip

Moderate

Artichoke
Asparagus
Bean sprouts
Broccoli
Brussel sprouts
Collard greens
Carrot
Corn
Olives
Edamame
Eggplant
Fennel
Leek
Lettuce
Onion
Parsnip
Pumpkin
Sauerkraut
Snow peas
Tomato
Turnip
Watercress
Zucchini

High

Beets
Beet greens
Beetroot
Celery
Chicory
Green Beans
Spinach
Swiss chard/
Silver beat
Potato
Taro
Kale
Yam
Sweet potato
Green capsicum

Fats, Nuts, Seeds & Snacks

Low

Butter
Margarine
Mayonnaise
Salad dressing
Vegetable oils
English muffin

Moderate

Flaxseed
Pumpkin seeds
Sunflower seeds
Tiger nuts
Macadamia nuts
Cashews
Popcorn
Psyllium-Husk

High

Buckwheat
Most nuts
Nut butters
Sesame seeds
Tahini
Walnuts
Chia seeds

Oxalate content of food

Herbs, Spices and Condiments

Low

Basil
Dill
Dijon Mustard
Oregano
Sage
Garlic
Ginger
Pickles
Vanilla
Vinegar
Coconut-Aminos
Nutmeg
Peppermint
White pepper

Moderate

Chives
Soy sauce
Thyme
Jams/preserves
Cinnamon

High

Black pepper
(more than 1tsp)
Marmalade
Oils
Parsley

Beverages

Low

Lemon juice
Lime juice
Apple Cider Vinegar
Apple juice
Green tea
Most herbal teas
Milk
Lemonade
Whiskey
Vodka
Distilled alcohols
Wine

Moderate

Coffee/latte
Yoghurt
Draft beer
Rosehip tea

High

Dark/robust beer
Black tea
Chocolate drinks
Juice (from high
oxalate fruits)
Instant coffee
Ovaltine/Milo
Soy milk
Almond milk

Oxalate content of food

Beans, Pulses & Grains

Low

Barley
White rices
Wild rice
Lentils
Black eyed peas
Pasta

Moderate

Oats
Brown rice
Butterbeans
Chickpeas
Lima beans
Corn
Oats
White bread/wheat/flour

High

Amaranth
Buckwheat
Bran cereal
Rye
Wheat bran
Wheat germ
Whole wheat
Broad beans
Black beans
Kidney beans
Soy beans
Tempeh
Natto
Quinoa
Tofu

Other

Low

Gelatin
Candy
Jelly
Apple Cider Vinegar
Honey
Sugar
Maple syrup

Moderate

Yoghurt

High

NOTES

Information for this guide has been gathered from www.melanieavalon.com/guides, www.lowoxalate.info and www.upmc.com.

The food tables are intended as a general guideline for overview and comparison. Due to the vast amount of (often conflicting) information, we use basic terminology of low, medium, and high.

Items are categorised based on their average serving size. Foods which have more than 10 mg of oxalate per serving are categorised as being high oxalate foods.

Please keep in mind that some "low" foods may actually contain none of the offending compound, or may contain more than anticipated.

If you can pinpoint a certain food sensitivity which causes issues for you, we recommend further researching that particular compound.

Reduce oxalate consumption slowly until you reach the desired "low oxalate intake" of 40 to 60 mg each day.