ANTINUTRIENT FOOD INTOLERANCE GUIDE

The Ultimate Guide to Identifying Food Intolerances



WELCOME

If you've been struggling with feeling unwell and believe foods are triggering your symptoms, we welcome you to read the Antinutrient Food Intolerance Guide. This guide was designed to identify the antinutrient foods which may be blocking nutrient absorption and possibly causing unwanted inflammatory food intolerance symptoms.



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PART ONE

Introduction

Are you experiencing any of the following symptoms?

- Gas
- Bloating
- Constipation
- Diarrhea
- Skin Issues
- Headaches
- Chronic Fatigue
- Joint Pain
- Muscle Pain
- Brain Fog
- Depression
- Anxiety
- Poor Sleep
- Weight Gain

If so, you may be suffering from antinutrient food intolerances which could be causing, amplifying, or contributing to these symptoms.

So, what are antinutrient food intolerances?

Antinutrients are primarily plant chemicals or compounds that reduce the body's ability to absorb essential nutrients. Antinutrient food intolerances then are specific foods which may not only block the absorption of key nutrients but can cause unwanted inflammatory symptoms.

But wait a minute.....how can foods, especially plant-based foods, cause these types of symptoms? I thought all plant-based foods were supposed to be healthy!

For most people, the inclusion of plant-based foods into their dietary regimen is extremely important to help provide the vitamins, minerals, and other nutrients that are the building blocks for which our bodies need. However, in susceptible individuals, these natural plant-based chemicals could be the trigger to their illness and health issues.

The ancient Greek physician Hippocrates once said, "Let food be thy medicine and medicine be thy food". However, food can also be one person's cause to their disease and symptoms. Unfortunately, specific foods and the natural chemicals and proteins within these foods are a major cause of many unwanted symptoms and health conditions. Even if the food is labeled as healthy by many, it still can pose a problem for a few.

For example, avocados are an excellent source of healthy fats and are abundant in many types of vitamins and minerals, but they are also high in histamine. Histamines are chemicals your immune system produces to eliminate a pathogen or foreign invader that's not supposed to be in the body. Many people associate histamines with environmental seasonal allergies and take antihistamine medicines such as Benadryl, Zyrtec, Allegra, and Claritin to block or reduce the production of histamines in the body. The symptoms of runny nose, sneezing, sinus pressure, headaches, and fatigue are commonly associated with histamine release from seasonal allergies. However, specific foods can also cause histamine release in the body such as avocados! So, as you can see, an avocado is traditionally deemed healthy, but for susceptible individuals who have histamine intolerances, an avocado can actually be the source of their health issues.

In the Antinutrient Food Intolerance Guide, we are going to explore the various types of antinutrients, symptoms commonly associated with antinutrients, and lastly the foods the antinutrients are found in.

The Antinutrient Food Intolerance Guide is the go-to resource on identifying antinutrient food chemicals and food intolerances.

PART TWO

The Harmful Effects of Antinutrients

Nutrients are chemical compounds in food that are used by the body to function properly. Nutrients provide the building blocks for living organisms to thrive and flourish. Carbohydrates, fats, protein, vitamins, minerals, and water are the core nutrients our bodies require in ample amounts. Without these essential nutrients, we would cease to exist. Thus, it's extremely important then to optimize the absorption of these nutrients into the body to realize the maximum health potential. The goal should be to identify and eliminate any mechanism or trigger which prohibits the absorption of these nutrients.

Antinutrients are one type of trigger which can block the absorption of nutrients and cause unwanted symptoms. Antinutrients are primarily plant chemicals or compounds that reduce the body's ability to absorb essential nutrients. Other times, antinutrients may be food chemicals or food proteins which trigger an inflammatory response in the body and negatively affects the absorption of nutrients because of intestinal inflammation.

However, not all antinutrients are bad and in many cases, they have various health benefits. Commonly found in grains, nuts, seeds, beans, fruits, and vegetables, antinutrients are chemical compounds designed to protect the plant from bacterial infections and being eaten by insects. These chemical compounds have been shown to lower cholesterol, balance blood sugar, boost the immune system, and even improve digestion among many other benefits. But in susceptible individuals or when ingesting large amounts of antinutrients over a prolonged period, a person increases their risk of having antinutrient food intolerances.

The main issues with antinutrients are their ability to:

- Block absorption of vitamins and minerals
- Interfere with digestive enzyme processes
- Cause inflammation in the gut and beyond

The Top 15 Antinutrient Intolerances

- 1 Lectins
- 2 Phytates
- 3 Gluten
- 4 Casein
- **5** Lactose
- 6 Histamines
- Saponins
- 8 Solanines

- 9 Oxalates
- 10 Tannins
- Tyramines
- Salicylates
- 13 Goitrogens
- 4 FODMAPs
- 15 Sulfites & Nitrates

Just to repeat, not all antinutrients are bad, nor should someone avoid the foods these antinutrients are found in if they do not have issues with nutrient absorption. But, if a person is suffering from nutritional deficiencies or experiencing food intolerance symptoms caused by antinutrient inflammatory reactions, then the careful process of identifying the specific foods and food chemicals which are causing the symptoms is important.

It's equally important to also differentiate if the food(s) which are causing your symptoms are a food allergy, food sensitivity, or food intolerance issue.



PART THREE

Understanding the Difference Between Food Allergies, Sensitivities, & Intolerances

There is much confusion around the differences between food allergies, food sensitivities, and food intolerances. It's common to hear people use these words interchangeably when referring to how foods affect them. However, there is a clear distinction between how food allergies vs. food sensitivities vs. food intolerances affect the body.

Food Allergies

Food allergies involve the immune system and cause immune-mediated reactions to food. The most common is an immunoglobulin E (IgE) reaction. IgEs are antibodies produced in the body as a response to allergenic foods. IgE food allergies cause lifethreatening symptoms such as low blood pressure, difficulty breathing, wheezing, dizziness, skin hives, anaphylaxis, and even death.

The most common foods which account for over 90% of IgE food allergies are:

- Milk
- Eggs
- Fish
- Shellfish

- Peanuts
- Tree Nuts
- Wheat
- Soybeans



Food Sensitivities

Food sensitivities can also involve the immune system but are not as severe or life-threatening. Food sensitivities produce immunoglobulin G (IgG) immune-mediated reactions. Whereas food allergies typically have an acute to a few hours' onset of symptoms, IgG food sensitivities may have a delayed reaction and take several hours or even days to manifest into unwanted symptoms. Common symptoms of bloating, diarrhea, constipation, fatigue, headaches, pain, and skin blemishes are often associated with food sensitivities.

Food Intolerances

Food intolerances do not have an immune component to them, but they may mimic the symptoms of food sensitivities. Food intolerances occur when your body is unable to digest specific foods because of digestive enzyme deficiencies. The most common type of food intolerance is lactose intolerance. The body does not produce enough of the lactase enzyme to help break down the lactose milk sugar from dairy-based foods.

Food Allergy = IgE Immune Response
Food Sensitivity = IgG Immune Response
Food Intolerance = Digestive Enzyme Deficiency



GLUTEN & WHEAT

The Difference Between a Food Allergy, Food Sensitivity, & Food Intolerance Example



Gluten is one of the top food proteins which has a profound effect on health. Gluten is a protein found in wheat, barley, rye, and even some oats. Additionally, it's found in a range of food products from marinades to sauces. In fact, the gluten-free food industry has exploded in recent years in response to consumers' demand to avoid gluten containing products. From gluten-free pastas and breads to gluten-free desserts and snacks, avoiding gluten at all costs has helped ignite a health movement.

When asking someone why they are removing gluten from their diets, a range of answers are usually presented. Some may say their bloating has diminished when adopting a gluten-free lifestyle, while others say they just feel better overall with more energy and even inflammatory pain reduction. All these health benefits to going gluten-free can mean the difference between feeling well compared to feeling ill.

It's great to feel better by going gluten-free, but it's equally important to know why adopting a gluten-free lifestyle has benefited your health. Understanding the "why" behind why you feel better with gluten-free foods can help determine imbalances in the body, but gluten may only be one type of food protein or chemical which contributes to your health issues.

Food Allergy to Wheat

A food allergy to wheat is an IgE immune-mediated response which can cause an acute or slightly delayed reaction of symptoms such as low blood pressure, hives, difficulty breathing, anaphylaxis, and even death. You can develop an IgE immune allergy to any of the proteins found in wheat such as albumin, globulin, gliadin, or gluten.

Food Sensitivity to Gluten

A food sensitivity to gluten is an IgG immune-mediated response which triggers unwanted symptoms. In fact, a condition called Non-Celiac Gluten Sensitivity has been developed for individuals who do not have Celiac Autoimmune Disorder, but still have an immune response to gluten proteins. From digestive symptoms to brain fog and pain, gluten sensitivities have a negative impact on one's health.

Food Intolerance to Gluten

A food intolerance to gluten can be the result of a deficiency in digestive enzymes in the gut. Digestive enzymes help break down foods into absorbable nutrients. Protease enzymes break down proteins, amylase enzymes break down carbohydrates, lipase enzymes break down fat, lactase enzymes break down milk sugars, etc.... There are many types of digestive enzymes in the gut, these are just a few of the main ones. With gluten intolerance, a person may have a deficiency in protease, endopeptidase, and exopeptidase digestive enzymes which aid in the breakdown of the gluten protein. The inability to breakdown the gluten protein into absorbable nutrients may result in gastrointestinal symptoms and even other symptoms outside the GI tract such as brain fog, depression, joint pain, skin blemishes, and more.

But What About Celiac Autoimmune Disease......

Celiac disease is a medical diagnosis based on one's own body producing antibodies to gluten proteins. When a person ingests foods with gluten, the body produces antibodies to attack the foreign pathogen to help eliminate it. These autoantibodies then mistakenly target healthy tissue because they're confused as to what is a foreign invader. Gastrointestinal inflammation symptoms are a hallmark of Celiac autoimmune disorder. However, other symptoms of fatigue, hair loss, pain, and more may also be present in patients with Celiac autoimmune disease. Celiac disease is neither a food allergy nor a food sensitivity, but rather an autoimmune disorder associated with the body's inability to distinguish gluten as a food protein, rather than a foreign pathogen.

The Top 10 Underlying Causes of Food Allergies, Sensitivities, & Intolerances

- Genetics
- 2 Stress
- 3 Poor Diet
- 4 Medication Usage
- 5 Immune Imbalances
- 6 Environmental Toxins & Allergies
- 7 Digestive Enzyme & Nutrient Deficiencies
- 8 Leaky Gut Syndrome
- 9 Small Intestinal Bacterial Overgrowth
- 10 Small Intestinal Fungal Overgrowth

The Antinutrient Food Intolerance Guide addresses food intolerances, not food allergies.

PART FOUR

Answering Your Food Intolerance Questions

Here are a few questions we commonly get from individuals who are seeking out more information about food intolerance-related health issues.

Can I just take a food allergy or food sensitivity test to identify my food intolerances?

Unfortunately, no. Food allergy and food sensitivity tests typically only identify immune-based IgE and IgG food-related allergies and sensitivities, not intolerances. Since food intolerances are enzyme deficiency-related, there is no gold-standard in lab testing to identify them. The best mechanism of identifying food intolerances is a manual process of monitoring your symptoms in relation to the foods you have eaten prior to the symptoms. By tracking food intake and carefully analyzing symptoms, you will begin the process of identifying possible antinutrient food intolerances.

What is the best process to follow in learning more about how foods are affecting my body?

The best course of action in identifying how foods are affecting your body would be to get tested for food allergies and food sensitivities. There are various lab companies which offer these types of IgE and IgG test panels. In addition to the lab testing, you would also carefully monitor your symptoms over 1–3 months to identify possible food intolerances. Since lab tests do not identify food intolerances, you'll need to take this extra step. There may be times you react to specific foods that are not listed in your food sensitivity and food allergy lab reports. These would most likely be your food intolerances. By testing for food allergies and food sensitivities, along with monitoring for food intolerances, you'll now have a complete picture of which foods are affecting your body.

If I do have food intolerances, how do I fix them?

The answer to this question would depend on various factors such as:

- What type of food intolerance do you have? Do you have lactose intolerance, histamine intolerance, solanine intolerance, and/or a combination of other intolerances?
- How severe is the intolerance? Is it causing minor symptoms such as bloating and fatigue or does it drastically affect your quality of life?
- How long have you had this intolerance? Have you been experiencing symptoms for a couple months or a few years?
- Have you been diagnosed with leaky gut syndrome, pancreatic enzyme deficiency, or small intestinal bacterial overgrowth syndrome? Did you take a lab test that measures zonulin, elastase, or SIBO?
- Have you tried eliminating specific foods to see if you feel better? Have you ever tried a food elimination and reintroduction dietary plan before?

In order to fix food intolerances, you would first need to understand the answers to the above questions. Sometimes, you may need to eliminate food(s) from your dietary plan for prolonged periods. Other times, you may just need specific digestive enzymes to help break down the protein or chemicals within foods to help find relief from food intolerances. Other times, you may need to fix an underlying issue such as SIBO, and then your body can heal, and you'll be able to tolerate foods. Unfortunately, there is no one-size-fits-all solution to fixing food intolerances.

What symptoms or conditions would I notice if I have food intolerances?

Food intolerances typically do not appear suddenly, nor do they initially affect your quality of life. But over months, years, and even sometimes decades, food intolerances can worsen and drastically affect your well-being. There are usually three phases an individual goes through as they progressively feel the impact of a food intolerance.

Phase I Interference

Initially, antinutrient food intolerances cause minimal symptoms. Most often, these minor symptoms are ignored and are just thought of as nagging symptoms throughout one's day. Minor headaches, occasional bloat, a skin rash, or the feeling of a little fatigue may be present. These symptoms cause minor interference with daily routines. During this phase, your body's ability to break down specific food chemicals or proteins begins to decline because of a loss of enzyme function.

Phase II Acceptance

As time progresses and you become increasingly deficient in specific digestive enzymes and you're continually exposed to the antinutrient threat, your body transitions into acceptance mode. The increase in inflammation paired with a decrease in nutrient absorption causes the body to cope with the new normal. Your body switches to overdrive mode and tries to compensate from the decline in nutrients and the rise in inflammation from food intolerances. The minor nagging symptoms which were present occasionally during phase one are now almost an everyday occurrence. During this phase, the antinutrient chemical compounds from foods begin to build up in the body because of depleted enzyme levels.

Phase III Burnout

In phase three, your body begins to burn out from being in continual overdrive mode. The combination of nutrient deficiencies with systemic inflammation from food intolerances becomes too much to handle. Your quality of life is impacted by health symptoms which affect everyday life. You may seek the help of a medical practitioner because of the unbearable symptoms. The continual onslaught of ingesting antinutrients and your body's inability to break them down leads to diagnosed medical conditions and symptoms.



Common Food Intolerance Symptoms & Conditions

- Acid Reflux
- Acne
- Allergies
- Arthritis
- Asthma
- ADHD
- Anxiety
- Autoimmune Disorders
- Bloating & Gas
- Brain Fog
- Chronic Fatigue
- Colitis
- Constipation
- Crohn's Disease
- Depression
- Dermatitis
- Diabetes
- Diarrhea
- Eczema
- Gallbladder Disorders
- Gastrointestinal Issues
- Hair Loss

- Headaches
- Head & Neck pain
- Heart Burn
- Heart Health Issues
- Insomnia
- Irritable Bowel Syndrome
- Irritability
- Joint Pain
- Migraines
- Multiple Sclerosis
- Muscle Pain
- Neuropathy
- PMS
- Psoriasis
- Restless Leg Syndrome
- Rosacea
- Sinusitis
- Tinnitus
- Thyroid Disorders
- Urticaria
- Weight Gain
- Weight Loss

It's usually not until phase three that we begin to recognize a true issue with our health. There may have been warning signs for years of possible antinutrient food intolerances, but it wasn't until the symptoms became unbearable that we decided to act. Unfortunately, the remedies which are often prescribed for the above symptoms and medical conditions act as a Band-Aid approach to covering up symptoms. If we do not address the underlying causation to the problem, then we will never be able to permanently fix the issue.

As we mentioned in the introductory portion of this guide, Hippocrates' statement of "Let food be thy medicine and medicine be thy food", we should utilize this approach to reverse the symptoms and conditions which were initially caused by foods themselves. Wouldn't it make sense if an antinutrient food or foods caused a health issue, then we would take the approach of eliminating that food or foods to reverse the health issue?

PART FIVE

Identifying Antinutrient Food Intolerances

The identification of antinutrient food intolerances is a critical first step to reducing inflammation in the body and improving nutrient absorption. The ability to understand your body and how it feels is paramount to boosting one's health.

In this section, we provide information on 15 different antinutrient food intolerances. Use this information to understand more about how food intolerances could affect your body.



GLUTEN INTOLERANCE

What is Gluten?

Gluten is a family of storage proteins known as prolamins which are found in certain grains such as wheat, rye, and barley. The prolamins of glutenin and gliadin are the prolamins in wheat, secalins are found in rye, and hordeins are found in barley. In gluten sensitive or intolerant individuals, gluten can cause inflammation in the body and block absorption of nutrients in the gut.

Gluten intolerance is a condition in which individuals experience symptoms similar to those of celiac disease after consuming gluten-containing foods, but they lack the autoimmune response and intestinal damage characteristics of celiac disease.

An intolerance to gluten is more common now due to several factors. Changes in wheat breeding and agricultural practices over the years have led to the development of wheat varieties with different gluten compositions. Some argue that modern wheat varieties may contain higher levels of gluten or different forms of gluten proteins that could potentially trigger immune responses in susceptible individuals. Changes to gut bacteria, increased leaky gut prevalence, and increased consumption of gluten-containing processed foods are also believed to play a role.

Gluten Intolerance Symptoms:

- Fatigue
- Rashes
- Acne
- Gas
- Bloating
- Anxiety

- Depression
- Diarrhea
- Constipation
- Joint Pain
- Thyroid Imbalances
- Headaches or Migraines

Natural Support for Gluten Intolerance:

There are no methods to effectively decrease the gluten content of foods, so the best course of action for gluten intolerance is eliminating foods high in gluten or take nutritional supplements with digestive enzymes known to help break down gluten proteins.

- Read ingredient labels when buying packaged foods that are not certified gluten-free, including marinated meats, and avoid wheat, barley, and rye-based ingredients. Some foods contain less common gluten-containing ingredients like malt vinegar, malt extract, barley malt syrup, rye malt, wheat starch, and barley malt extract that should also be avoided.
- Traditional soy sauce contains wheat and is a common source of hidden gluten exposure. Opt for gluten-free soy sauce and be cautious when eating at restaurants.
- Some other varieties of wheat are available in stores and restaurants and are sometimes mistaken for gluten-free grains due to their unique names. These foods are wheat and should be avoided: farro, einkorn, semolina, farina, bulgur, spelt, and Kamut.
- Breaded foods, soups, sauces, and French fries and other fried foods are common sources of gluten at restaurants. It's best to double-check foods with the server to ensure they are gluten-free.
- If you must eat gluten-containing foods, then take DPP IV digestive enzymes with endopeptidase and exopeptidase in them.
- Take multi-strain probiotics.

High Gluten Foods to Avoid

V Kamut

✓ Seitan

V Rye

GRAINS ✓ Barley ✓ Semolina ✓ Beer ✓ Bulgur ✓ Spelt ✓ Couscous ✓ Teff ✓ Einkorn ✓ Triticale ✓ Farro ✓ Wheat ✓ Beer ✓ Wheat

Wheat Bran

Wheat Germ

There are hundreds of foods which contain hidden sources of gluten. Make sure you read labels carefully.



CASEIN INTOLERANCE

What is Casein?

Casein is a protein found in milk and dairy products, constituting a significant portion of the total protein content in cow's milk. Comprising about 80% of milk protein, casein is classified as a complete protein, containing all essential amino acids necessary for human health. It exists in a complex structure known as a micelle, which contributes to its slow digestion and absorption in the gastrointestinal tract. This slow-release property makes casein an excellent source of sustained amino acid release, making it beneficial for muscle protein synthesis and maintenance.

In individuals with casein intolerance, consuming foods containing casein can lead to various adverse reactions in the body. Casein intolerance is characterized by the inability to properly digest and process this milk protein, resulting in symptoms that primarily affect the gastrointestinal system. When someone with casein intolerance ingests casein-containing foods such as milk, cheese, or yogurt, the digestive system may struggle to break down the protein, leading to the release of incompletely digested fragments and thus triggering symptoms.

Casein Intolerance Symptoms:

- ADHD
- Bloating
- Gas
- Diarrhea
- Constipation
- Abdominal Pain
- Rashes

- Itching
- Headaches
- Fatigue
- Joint Pain
- Restlessness
- Irritability

Natural Support for Casein Intolerance:

There aren't any ways to decrease the casein content in foods, so it's best to eliminate foods high in casein. Here are some ways to make the switch easier:

 Choose non-dairy alternatives such as plant-based milks (almond, coconut, cashew) or dairy-free cheese and yogurt products.

- Check food labels carefully to identify products that are free of milk or milkderived ingredients. Some processed foods may contain hidden sources of casein, such as whey or caseinate.
- Prepare meals at home whenever possible to minimize exposure to dairy at restaurants.
- If you must eat casein-containing foods, then take DPP IV digestive enzymes with endopeptidase and exopeptidase in them.
- Take multi-strain probiotics.

High Casein Foods to Avoid

- **M** Ayran
- **M** Butter
- **☑** Buttermilk
- ✓ Camembert
- ✓ Cheddar Cheese
- ✓ Cheese Curds
- ✓ Cottage Cheese
- **M** Cream
- ✓ Cream Cheese
- ✓ Feta

- ✓ Ghee
- ✓ Gorgonzola
- ✓ Greek Yogurt
- ✓ Gruyere
- ✓ Half & Half
- ✓ Heavy Whipping Cream
- ✓ Kefir
- ✓ Manchego
- Milk, Cow
- ✓ Milk, Goat

- ✓ Milk, Sheep
- ✓ Mozzarella
- **V** Parmesan
- ✓ Provolone Cheese
- **M** Ricotta
- ✓ Sour Cream
- ✓ Romano Cheese
- ✓ Swiss Cheese
- ✓ Whey Protein Isolate
- **Yogurt**



LACTOSE INTOLERANCE

What is Lactose?

Lactose is a natural carbohydrate sugar found in milk and dairy products. Chemically, it is a disaccharide composed of two sugar molecules, glucose and galactose. Lactose is unique in that it requires an enzyme called lactase for proper digestion in the human body. Lactase is produced in the small intestine, and its function is to break down lactose into its individual components, allowing for absorption into the bloodstream. This process is crucial for individuals to derive energy and nutrients from dairy products.

Lactose intolerance is a common condition where individuals lack sufficient levels of lactase, leading to difficulty digesting lactose. When people with lactose intolerance consume dairy products, undigested lactose can pass into the colon, where it ferments, causing symptoms such as bloating, gas, abdominal pain, and diarrhea. It's important to note that lactose intolerance is distinct from a milk allergy, which involves an immune system response to proteins in milk rather than the inability to digest lactose.

Lactose Intolerance Symptoms:

Bloating

Gas

Abdominal Pain

- Diarrhea
- Constipation
- Nausea

Natural Support for Lactose Intolerance:

Implement these strategies to reduce lactose consumption or to decrease symptoms:

- Choose non-dairy alternatives such as plant-based milks (almond, coconut, cashew) or dairy-free cheese and yogurt products.
- Check food labels carefully to identify products that are free of milk or milk-derived ingredients. There are also lactose-free dairy products available that have had the lactose removed or the lactase enzyme added to prevent symptoms.
- Choose A2 dairy products whenever feasible because A2 dairy is associated with reduced gastrointestinal symptoms.

- Prepare meals at home whenever possible to minimize exposure to dairy at restaurants.
- Use lactase digestive enzyme supplements to support lactose digestion and to decrease symptoms.
- Take a multi-strain probiotic.

High Lactose Foods to Avoid

- ✓ Ayran
- **M** Butter
- **M** Buttermilk
- ✓ Camembert
- ✓ Cheese Curds
- ✓ Cottage Cheese
- **V** Cream
- ✓ Cream Cheese

- ✓ Feta
- ✓ Gorgonzola
- ✓ Gruyere
- Malf & Half
- ✓ Heavy Whipping Cream
- ✓ Kefir
- ✓ Manchego
- ✓ Milk, Cow

- ✓ Milk, Goat
- ✓ Milk, Sheep
- ✓ Mozzarella
- **M** Provolone Cheese
- **M** Ricotta
- **Sour Cream**
- ✓ Swiss Cheese
- ✓ Yogurt



LECTIN INTOLERANCE

What are Lectins?

Lectins are a family of carbohydrate-binding proteins that can bind to various receptor cells in the body, particularly sites along the digestive lining causing inflammation and irritation. The highest amounts of lectins are found in plants because plants use lectins as a natural defense mechanism against insect predators. This mechanism of defense to ward off insects from eating the plant is beneficial to plants but may pose a health issue to humans when consumed.

Lectins are considered one of the top antinutrients because of our inability to properly digest and degrade lectins in the gastrointestinal tract. At minimal ingested amounts, lectins may be beneficial to our health. However, eating lectins in larger quantities over prolonged periods of time in susceptible lectin-sensitive individuals may cause an inflammatory response in the body. Lectins found in plant-based foods can interfere with nutrient absorption in the small intestine.

Lectin Intolerance Symptoms:

- Skin Rashes
- Gas
- Bloating
- Nausea
- Fatigue

- Anxiety
- Depression
- Insomnia
- Joint Pain and Stiffness
- Allergy-Like Symptoms

Natural Support for Lectin Intolerance:

There are a few ways to reduce the lectin content in certain high-lectin vegetables, grains, and legumes:

- The skins and seeds contain higher concentrations of lectins than the flesh, so remove skins and seeds from foods like tomatoes, bell peppers, cucumbers, zucchini, etc.
- Soak grains and legumes for 10-12 hours before cooking to reduce the lectin content
 and improve digestibility. It's also recommended to change the water every 3-4
 hours while soaking. Note: When soaking grains, add one tablespoon of lemon juice
 or apple cider vinegar per cup of grains. Salt is optional.

- The high temperature in pressure cooking degrades lectins in foods more quickly than regular boiling. Pressure cook high-lectin vegetables, soaked grains, and soaked legumes to reduce the lectin content. Boiling is also sufficient if a pressure cooker is not available, but they will need to cook longer.
- Lectins are not broken down by digestive enzymes, but supporting gut health can reduce the number of lectins reaching the bloodstream and therefore lessen the inflammatory response.

High Lectin Foods to Avoid

DAIRY

- **M** Butter
- ✓ Cheese
- ✓ Cottage Cheese
- ✓ Cow's Milk
- ✓ Ice Cream
- **V** Yogurt

FRUITS & VEGETABLES

- ✓ Bell Peppers
- **M** Chile Peppers
- ✓ Cucumbers
- **Solution** Eggplant
- ✓ Goji Berries
- **Melons**
- **V** Pumpkin
- ✓ Squash
- ▼ Tomatillos
- ▼ Tomatoes
- ✓ Zucchini

OILS

- ✓ Corn Oil
- ✓ Cottonseed Oil
- ✓ Grapeseed Oil
- M Peanut Oil
- ✓ Safflower Oil
- ✓ Soybean Oil
- ✓ Sunflower Oil
- ✓ Vegetable Oil

GRAINS & PSEUDO-GRAINS

- ✓ Amaranth
- **M** Barley
- ✓ Barley Grass
- **M** Brown Rice
- **M** Buckwheat
- **W** Bulgur
- ✓ Corn
- ✓ Einkorn
- ✓ Farro
- ✓ Kamut
- ✓ Kasha
- **Oats**
- ✓ Popcorn
- **Quinoa**
- ✓ Rye
- ✓ Spelt
- **Wheat**
- **Wheat Germ**
- **Wheatgrass**
- **White Rice**
- **Wild Rice**

NUTS & SEEDS

- ✓ Almonds
- **M** Cashews
- **M** Chia Seeds
- **V** Peanuts
- Pumpkin Seeds
- ✓ Sunflower Seeds

LEGUMES & LENTILS

- ✓ Bean Sprouts
- **V** Black Beans
- ✓ Black-Eyed Peas
- **M** Chickpea
- **M** Chili Beans
- ✓ Fava Beans
- **M** Garbanzo
- **Great Northern Beans**
- **Green Peas**
- ✓ Kidney Beans
- ✓ Lentils
- ✓ Lima Beans
- ✓ Mung Beans
- ✓ Navy Beans
- **V** Peanuts
- Peas, Green
- Peas, Snow
- Peas, Sugar Snap
- Pinto Beans
- Soybeans
- ✓ Split Peas
- ✓ Tofu

HERBS AND SPICES

- ✓ Crushed Red Pepper
- ✓ Marjoram
- **M** Nutmeg
- Peppermint, Fresh

BEVERAGES

✓ Beer ✓ Black Tea

HISTAMINE INTOLERANCE

What is Histamine?

Histamines are natural compounds produced by the body during an immune response. Commonly associated with environmental allergies, histamines help the body to eliminate allergies and pathogens. However, histamines are also found in certain foods. Some individuals may be sensitive or intolerant to histamine, and the consumption of histamine-rich foods can lead to adverse reactions.

Some foods naturally have high levels of histamine in them while other foods create histamine through the bacterial breakdown of the amino acid histidine. This process, known as histamine formation, often occurs in aged or fermented foods, as well as those that are improperly stored.

Other foods are naturally low in histamine. but they may internally trigger the body to release histamine. These foods are known as histamine liberators. Histamine liberators work by causing the mast cells or immune basophils to release histamine into the surrounding tissues through a process known as degranulation. This release of histamine can contribute to allergic reactions and other symptoms in histamine-sensitive individuals.

It's important to have adequate levels of DAO enzymes in your gut. DAO (diamine oxidase) is an enzyme naturally produced by the body and found in various tissues, including the small intestine. Its primary role is to break down histamine that comes from ingested food. In cases of histamine intolerance, individuals may have lower levels of DAO or reduced enzyme activity, contributing to the difficulty in processing histamine. DAO supplementation may be helpful for some individuals.

Histamine Intolerance Symptoms:

- Hives
- Headaches
- Fatigue
- Itching
- Rashes
- Anxiety
- Insomnia

- Depression
- Congestion
- Gas
- Bloating
- Diarrhea
- Skin Rashes
- Joint Pain and Stiffness

Natural Support for Histamine Intolerance:

- Get meat and seafood as fresh as possible. The longer an animal protein sits out
 without being frozen, the more histamine it forms over time. Seafood forms
 histamine particularly fast, so opt for fresh-caught seafood, or seafood that was
 frozen immediately after catch. Avoid canned and processed meats and
 seafood.
- Nearly all beef in grocery stores is aged which increases the histamine content.
 Choose chicken and other fresh cuts of meat that have not been aged and remember to check the frozen aisle for fresh frozen meats.
- If eating a food high in histamine, do not combine it with any other foods that are high in histamine or that are histamine liberators.
- Avoid frying or grilling foods and opt for boiling. Frying and grilling can increase the amount of histamine in foods, especially meat and seafood.
- Take diamine oxidase digestive enzymes to help breakdown the histamines found in foods.



High Histamine Foods to Avoid

MEATS & POULTRY

- ✓ Bacon, Pork
- ▼ Bacon, Turkey
- **▼** Beef
- ☑ Beef Jerky
- **M** Bologna
- ✓ Chorizo
- **✓** Ham
- **M** Pancetta
- **V** Pepperoni
- **V** Prosciutto
- **Salami**
- ✓ Sausage, All
- ✓ Soppressata

NUTS

- ✓ Cashews
- **M** Peanuts

SEEDS

✓ Cacao

CHOCOLATE

- Baking Chocolate
- M Bittersweet Chocolate
- M Dark Chocolate
- Milk Chocolate
- **V** Ruby Chocolate
- M Semisweet Chocolate

SEAFOOD

- *Fresh-Caught Fish are Low Histamine*
- Anchovies, Canned
- M Blue Crab
- **V** Catfish
- **V** Clams
- ✓ Cod
- **Snails**
- **M** Crawfish

- **M** Halibut
- **V** King Crab
- **V** Lobster
- ✓ Mackerel
- Mahi Mahi
- **Mussels**
- **V** Oysters
- ✓ Salmon
- ✓ Sardines, Canned
- ✓ Scallops
- ✓ Shrimp
- ✓ Snow Crab
- ✓ Softshell Crab
- ✓ Tuna, Canned

DAIRY

- **V** Ayran
- **▼** Buttermilk
- ✓ Camembert
- **M** Cheddar Cheese
- ✓ Evaporated Milk
- **V** Feta
- Gorgonzola
- **Greek Yogurt**
- ✓ Gruyere
- ✓ Kefir
- ✓ Manchego
- ✓ Mozzarella
- **M** Parmesan
- ✓ Provolone
- **▼** Ricotta
-
- ✓ Sour Cream
- **M** Romano Cheese
- ✓ Swiss Cheese
- ✓ Yogurt

SUGARS & SWEETENERS

- Aspartame
- **M** Barley Malt

BEVERAGES

- **Ø** Beer
- M Black Tea
- **M** Chai Tea
- ✓ Chamomile Tea
- **M** Champagne
- ✓ Coffee
- M Hibiscus Tea
- ✓ Kombucha
- **Matcha**
- ✓ Oolong Tea
- ✓ Orange Juice
- ✓ Red Wine
- ✓ Rooibos Tea
- ✓ Vodka
- **Whiskey**
- **White Rum**
- **White Wine**
- Yerba Mate

LEGUMES & LENTILS

- M Black Beans
- ✓ Black-Eyed Peas
- Chickpea
- ✓ Chili Beans
- ✓ Fava Beans
- ✓ Great Northern Beans
- ✓ Kidney Beans
- ✓ Lentils
- ✓ Lima Beans
- **Mung Beans**
- **V** Navy Beans
- **V** Peanuts
- ✓ Peas, Green
- **Y** Peas, Snow
- Peas, Sugarsnap
- ✓ Pinto Beans
- Soybeans
- ✓ Split Peas

FRUITS

- ✓ Cherry
- ✓ Cranberry
- **V** Currant
- **V** Date
- ☑ Dried Fruits, All
- **M** Kumquat
- ✓ Loganberry
- ✓ Mandarin Orange
- **M** Nectarine
- **M** Plantain
- **M** Plum
- **V** Plumcot
- Raisins Grape
- Raspberry
- **M** Redcurrant
- **Tangerine**
- **White Currant**

HERBS & SPICES

- **M** Allspice
- **M** Anise
- Apple Cider Vinegar
- **M** Cayenne
- ✓ Chili Powder
- **V** Cloves
- ✓ Cocoa Nibs
- ✓ Cocoa Powder
- ✓ Nutmeg
- Paprika
- ✓ Paprika, Smoked
- ✓ Vanilla Bean
- ✓ Vanilla Extract
- ✓ Vinegar, Balsamic
- ✓ Vinegar, Malt
- ✓ Vinegar, Red Wine
- ✓ Vinegar, White

VEGETABLES

- ✓ Avocado
- ✓ Eggplant
- ✓ Olives, Black
- Olives, Green
- ✓ Pickles (Any Vegetable)
- **M** Pumpkin
- ✓ Sauerkraut
- **Spinach**
- ✓ Tomato

Histamine Liberator Foods to Avoid

FRUITS

- **M** Bananas
- **M** Blackberries
- ✓ Clementine Orange
- Finger Lime
- **M** Grapefruit
- **V** Kiwi
- ✓ Lemon
- **V** Limes
- Mandarin Orange
- **Oranges**
- Papaya
- **Y** Pineapple
- Raspberries
- Strawberries

SEAFOOD

- Anchovies, Canned
- M Blue Crab

- **V** Clams
- Crawfish
- **V** King Crab
- **V** Lobster
- **Mackerel**
- **Mussels**
- ✓ Oysters
- ✓ Sardines, Canned
- ✓ Scallops
- ✓ Shrimp
- ✓ Snow Crab
- ✓ Softshell Crab
- 🗹 Tuna, Canned

VEGETABLES

- ✓ Avocado
- ✓ Eggplant
- Pepper, Ghost
- Pepper, Habanero

- ✓ Pepper, Jalapeno
- Pepper, Poblano
- ✓ Pepper, Serrano
- ✓ Spinach
- ✓ Tomatoes

DAIRY

- ✓ Ayran
- **M** Buttermilk
- **V** Camembert
- Cheddar Cheese
- **V** Feta
- **☑** Gruyere
- ✓ Kefir
- ✓ Manchego
- **V** Parmesan
- ✓ Romano Cheese
- **M** Swiss Cheese

SEEDS

✓ Cacao

NUTS

- **M** Cashews
- **M** Peanuts
- **Walnuts**

HERBS & SPICES

- ✓ Chili Powder
- ✓ Cinnamon
- ✓ Cocoa Nibs
- ✓ Cocoa Powder

- **M** Nutmeg
- ✓ Vinegar, Balsamic
- ✓ Vinegar, Malt
- ✓ Vinegar, Red Wine
- ✓ Vinegar, White

CHOCOLATE

- ✓ Baking Chocolate
- **☑** Bittersweet Chocolate
- Dark Chocolate
- Milk Chocolate
- ▼ Ruby Chocolate
- ✓ Semisweet Chocolate

DRINKS

- **M** Beer
- **M** Champagne
- ✓ Coffee
- ✓ Kombucha
- ✓ Orange Juice
- **M** Red Wine
- ✓ Vodka
- **Whiskey**
- **White Rum**
- **White Wine**



FODMAP INTOLERANCE

What are FODMAPs?

FODMAPs, an acronym for Fermentable Oligosaccharides, Disaccharides, Monosaccharides, and Polyols, are a group of short-chain carbohydrates and sugar alcohols that are commonly found in various foods. These compounds are classified as fermentable, meaning they have the potential to be fermented by gut bacteria, leading to the production of gas and other byproducts in individuals who are intolerant to FODMAPs.

FODMAP intolerance is often associated with several risk factors. Conditions like inflammatory bowel diseases (IBD), including Crohn's disease and ulcerative colitis, may elevate the risk due to chronic inflammation of the digestive tract. Additionally, irritable bowel syndrome (IBS), small intestinal bacterial overgrowth (SIBO) and post-infectious gastrointestinal issues can contribute to the development of FODMAP intolerance. Genetic factors play a role, with some individuals having a genetic predisposition to reduced tolerance of certain carbohydrates. Psychological factors like stress, anxiety, and depression can exacerbate symptoms, as can hormonal influences, particularly in women.

FODMAP Intolerance Symptoms:

Bloating

Gas

Poor Digestion

• Diarrhea

Constipation

Abdominal Pain

Rashes

Itching

Joint Pain

Headaches

Natural Support for FODMAP Intolerance:

Here are some effective tips to reduce FODMAP consumption:

 Familiarize yourself with foods high in FODMAPs, including specific fruits, vegetables, grains, and sweeteners. Understanding the sources of FODMAPs is crucial for effective avoidance.

- Check food labels carefully to identify ingredients that may contain high levels
 of FODMAPs. Common additives and sweeteners like fructose, sorbitol, and
 mannitol should be monitored. Garlic and onion are also common symptom
 triggers that should be avoided, including garlic powder and onion powder.
- Prepare meals at home using fresh, whole ingredients. This gives you better control over the FODMAP content in your meals.
- Pay attention to portion sizes, as some low-FODMAP foods can become high in FODMAPs when consumed in large quantities.
- Take multi-strain carbohydrate digesting enzymes which include amylase, glucoamylase, lactase, cellulase, hemicellulase, xylanase, and invertase.

High FODMAP Foods to Avoid

MEATS

- **V** Pancetta
- ✓ Pepperoni
- ✓ Salami
- ✓ Soppressata

GRAINS & PSEUDO-GRAINS

- **M** Barley
- **✓** Bran
- ✓ Couscous
- **M** Kamut
- **Muesli**
- ✓ Rye
- ✓ Semolina
- ✓ Spelt
- **Wheat**
- **Wheat Germ**

VEGETABLES

- ✓ Asparagus
- ✓ Avocado
- ✓ Cabbage
- ✓ Cassava
- ✓ Cauliflower
- ✓ Celery
- **M** Garlic
- **M** Green Onions
- ✓ Kelp

- ✓ Leeks
- **Mushrooms**
- **✓** Onions
- **M** Shallots

HERBS AND SPICES

- ✓ Carob Powder/Flour
- ✓ Garlic Powder
- **✓** Garlic Salt
- ✓ Onion Powder

MISCELLANEOUS

Milk Chocolate

DAIRY

- **▼** Buttermilk
- ✓ Cream
- ✓ Cream Cheese
- **Greek Yogurt**
- Heavy Whipping Cream
- **M** Kefir
- Milk, Cow
- Milk, Goat
- Milk, Sheep
- Ricotta
- ✓ Sour Cream
- ✓ Whey Protein Isolate

Yogurt

FRUITS

- ✓ Apple, Golden Delicious
- ✓ Apple, Granny Smith
- ✓ Apricot
- **M** Banana
- ✓ Blackberry
- ✓ Cherry
- **V** Currants
- **V** Fig
- ✓ Goji Berry
- **Grapefruit**
- **Guava**
- ✓ Lychee
- ✓ Mango
- ✓ Nectarine
- **M** Peach
- **Y** Pear
- **V** Persimmon
- **M** Plum
- Pomegranate
- **M** Raisins, Grape
- Watermelon

NUTS & SEEDS

- ✓ Cashews
- **Pistachios**

Sunflower Seeds

BEVERAGES

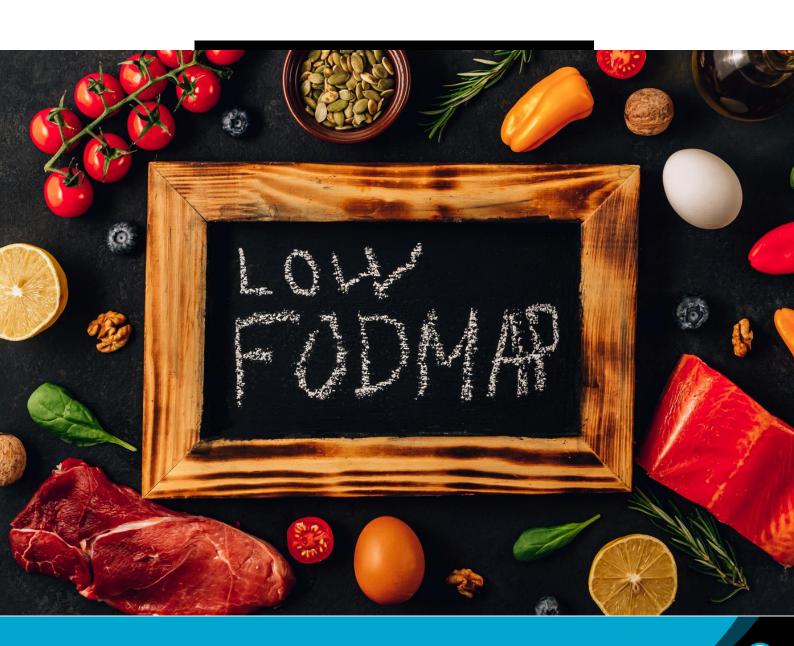
- ✓ Apple Juice
- ✓ Beer
- ✓ Black Tea
- ✓ Chamomile Tea
- **M** Champagne
- Kombucha
- ✓ Orange Juice
- ✓ Sherry
- **Vodka**
- **White Tea**

LEGUMES & LENTILS

- **M** Black Beans
- ✓ Black-Eyed Peas
- ✓ Chickpea
- **V** Kidney Beans
- ✓ Lima Beans
- **Mung Beans**
- ✓ Peas, Green
- ✓ Peas, Snow
- ✓ Peas, Sugar snap
- ✓ Soybeans
- ✓ Split Peas

SUGARS & SWEETENERS

- ✓ Agave
- ✓ Corn Syrup
- ✓ Fructose
- ✓ Honey
- **M** Inulin
- ✓ Isomalt
- ✓ Lactitol
- **Maltitol**
- **Mannitol**
- **Molasses**
- ✓ Sorbitol



SOLANINE INTOLERANCE

What are Solanines?

Solanines are a group of naturally occurring chemical compounds known as glycoalkaloids, primarily found in plants of the Solanaceae (nightshade) family, which includes potatoes, tomatoes, eggplants, and peppers. These compounds serve as natural defense mechanisms for the plants, helping protect them against pests and pathogens. Scientifically, solanines are characterized by their steroidal structure and their potential toxicity to humans due to its ability to irritate the digestive tract and interfere with intracellular communication

While solanines are generally present in low levels in these foods and are well-tolerated by most people, they can cause symptoms in solanine-sensitive individuals. Joint pain and gastrointestinal distress are primary symptoms of solanine intolerance.

Symptoms of Solanine Intolerance:

- Joint Pain and Stiffness
- Bloating
- Gas
- Diarrhea
- Constipation

- Headaches
- Abdominal Pain
- Fatigue
- Muscle Pain and Soreness

Natural Support for Solanine Intolerance:

Here are a few tips on reducing solanine consumption:

- Peeling vegetables like potatoes and eggplants can help reduce the solanine content, as solanines are often concentrated in or near the skin.
- Remove and discard any green or sprouted parts of potatoes, as they tend to contain higher levels of solanines. This includes eyes, shoots, and green skin.
- Cooking vegetables at high temperatures can partially break down solanines. Boiling, baking, roasting, or frying can be effective methods.
- Allowing foods like tomatoes to fully ripen can help reduce solanine levels. Unripe tomatoes may have higher concentrations of solanines.

High Solanine Foods to Avoid

- ☑ Cayenne Pepper
- ✓ Chili Pepper
- **☑** Eggplant
- ☑ Goji Berries
- ✓ Green Pepper
- ✓ Red Pepper

- ✓ Okra
- ✓ Paprika
- ✓ Tomatillos
- ✓ Tomatoes
- ✓ White Potatoes



SAPONIN INTOLERANCE

What are Saponins?

Saponins are a group of bitter-tasting chemicals that occur naturally in plants and get their name from their ability to form soap-like foams in water. Like other antinutrients, saponins act as a plant's natural defense mechanism against insect predators. Saponins possess antimicrobial, antifungal, antiparasitic, and insecticidal properties. Primarily found in plant-based foods, saponins can cause inflammation in saponin-sensitive individuals and block absorption of nutrients such as magnesium, iron, zinc, calcium, vitamin A, and vitamin E.

Saponins can interfere with nutrient absorption in several ways. Saponins have the ability to form complexes with minerals, such as iron, zinc, calcium, and magnesium. These complexes are insoluble and can reduce the bioavailability of minerals by preventing their absorption in the digestive tract. Saponins may also interact with the gut microbiota, influencing the microbial composition in the digestive system. Changes in the gut microbiota can, in turn, affect nutrient metabolism and absorption.

Saponin Intolerance Symptoms:

- Itching
- Bloating
- Diarrhea
- Headaches
- Nausea

- Fatigue
- Diarrhea
- Abdominal Pain
- Joint Pain and Stiffness

Natural Support for Saponin Intolerance:

It's important to limit the consumption of foods high in saponins, but there are a few ways to reduce the saponin content of some foods:

• Soak grains and legumes for 10–12 hours before cooking to reduce the saponin content and improve digestibility. It's also recommended to change the water every 3–4 hours while soaking. Note: When soaking grains, add one tablespoon of lemon juice or apple cider vinegar per cup of grains. Salt is optional.

- Removing the outer layers of fruits, vegetables, and grains can reduce the saponin content since a large portion of the saponins are found in the skin.
 Peeling tomatoes, apples, or removing the outer layer of quinoa can lower saponin levels.
- Boiling, steaming, or baking foods can help break down and reduce saponin content.

High Saponin Foods to Avoid

GRAINS & PSEUDO-GRAINS

- ✓ Amaranth
- **V** Oats
- **V** Quinoa

BEVERAGES

- ✓ Beer
- **M** Red Wine
- ✓ Rooibos Tea

HERBS & SPICES

- ✓ Fenugreek
- Ginseng

LEGUMES & LENTILS

- M Black Beans
- ✓ Black-Eyed Peas
- **M** Chickpeas

- **M** Chili Beans
- **▼** Edamame
- ▼ Fava Beans
- **M** Great Northern Beans
- **V** Kidney Beans
- **V** Lentils
- ✓ Lima Beans
- **Mung Beans**
- **Mavy Beans**
- **7** Peanuts
- ✓ Peas, Green
- ✓ Peas, Snow
- ✓ Peas, Sugar snap
- **7** Pinto Beans
- Soybeans
- ✓ Split Peas

FRUITS

- ✓ Acai
- Apples
- **V** Bananas
- ✓ Blueberry
- **M** Cherries
- **Grapes**
- ✓ Raspberry
- ✓ Strawberry

VEGETABLES

- ✓ Asparagus
- **Garlic**
- ✓ Okra
- **M** Onions
- ✓ Spinach
- ✓ Tomato



SALICYLATE INTOLERANCE

What are Salicylates?

Salicylates are natural compounds found in various plants that act as a defense mechanism against pathogens and predators. They belong to a class of compounds known as salicylic acids, with aspirin being a synthetic derivative of salicylates. While these compounds have potential health benefits due to their anti-inflammatory nature, some individuals may experience sensitivity or intolerance to salicylates, leading to adverse reactions.

Salicylate intolerance occurs when the body has difficulty processing and metabolizing salicylates. While many people tolerate salicylates well, individuals with salicylate intolerance may experience negative effects due to the inflammatory response. Salicylate may also interfere with the absorption of non-heme iron, the form of iron found in plants, potentially contributing to iron deficiencies, especially for individuals following a plant-based diet.

Salicylate Intolerance Symptoms:

- Headaches or Migraines
- Bloating
- Gas
- Rashes
- Diarrhea
- Nausea

- Tinnitus
- Congestion
- Joint Pain
- Restlessness
- Anxiety
- Irritability

Natural Support for Salicylate Intolerance:

Here are some ways to reduce salicylate consumption in addition to avoiding high-salicylate foods:

- Cooking can decrease the salicylate content in certain foods. Boiling, steaming, or microwaving are cooking methods that may be more effective at reducing salicylates compared to frying or roasting.
- Peeling the outer layers of fruits and vegetables may help reduce salicylate levels, as these compounds are often concentrated in the skin or outer leaves.

- Some food additives, such as artificial colors and preservatives, can contribute to salicylate intake. Check food labels and choose products without unnecessary additives and stick with whole foods as much as possible.
- Herbs and spices high in salicylates may be tolerated by some salicylatesensitive individuals since spices are usually not eaten in large quantities in one sitting. Avoid high-salicylate spices when possible and use them sparingly when needed.

High Salicylate Foods to Avoid

VEGETABLES

- ✓ Artichoke
- Arugula
- ✓ Avocado
- ✓ Beets
- ✓ Bell Pepper, All
- ✓ Broccoli
- ✓ Broccolini
- ✓ Butternut Squash
- ✓ Chicory
- ✓ Cucumber
- ✓ Delicata Squash
- **▼** Eggplant
- ✓ Endive
- ✓ Fava Beans
- ✓ Jicama
- ✓ Kelp
- ✓ Romaine Lettuce
- ✓ Olives, All
- ✓ Peppers, Hot
- **V** Pumpkin
- ✓ Radish
- **Spinach**
- ✓ Sweet Potatoes
- ▼ Tomatillo
- ✓ Tomato
- **Wasabi**
- **M** Water Chestnut
- Watercress
- **Yam**

- ✓ Yellow Squash
- ✓ Zucchini

BEVERAGES

- Apple Juice
- ✓ Beer
- M Black Tea
- ✓ Chai Tea
- ✓ Chamomile Tea
- **M** Champagne
- ✓ Coffee
- ✓ Green Tea
- ✓ Hibiscus Tea
- ✓ Kombucha
- **Matcha**
- ✓ Oolong Tea
- Orange Juice
- ✓ Red Wine
- ✓ Rooibos Tea
- ✓ Sherry
- ✓ Spiced Rum
- ✓ White Tea
- **White Wine**
- Yerba Mate

SEEDS

- ✓ Cacao
- ✓ Chia Seeds
- ▼ Flax Seeds
- **M** Hemp Seeds
- **V** Pumpkin Seeds

- ✓ Cacao
- ✓ Chia Seeds
- ✓ Flax Seeds
- **M** Hemp Seeds

MISCELLANEOUS

- ✓ Chocolate
- ✓ Corn

FRUITS

- ✓ Apples
- ✓ Apricot
- ✓ Blackberry
- ✓ Blueberry
- ✓ Boysenberry
- ✓ Cantaloupe
- ✓ Cherry
- Cranberry
- Currants
- **M** Date
- ✓ Dragon Fruit
- ✓ Dried Fruits, All
- **V** Durian
- ✓ Elderberry
- ✓ Goji Berry
- ✓ Grapes
- ✓ Grapefruit
- ✓ Guava
- Material Meters of the Mete
- ✓ Jackfruit

- ✓ Loganberry
- ✓ Loquat
- **V** Lychee
- **Mango**
- ✓ Mulberry
- Mectarine
- Oranges
- Peach
- **V** Pear
- **M** Pineapple
- Plum
- ✓ Raspberry
- ✓ Strawberry
- **Watermelon**

NUTS

- ✓ Almonds
- **V** Black Walnuts
- **M** Brazil Nuts
- **M** Chestnuts
- ✓ Coconut
- Macadamia Nuts
- M Pili Nuts
- **V** Pine Nuts
- **V** Pistachios
- **Tiger Nuts**
- **Walnuts**

HERBS & SPICES

- Adobo Seasoning
- ✓ Allspice
- ✓ Almond Extract
- **M** Anise
- ✓ Apple Cider Vinegar
- **M** Basil
- ✓ Bay Leaves
- ✓ Cardamom
- ✓ Cayenne Pepper
- ✓ Chili Powder
- **M** Cinnamon
- **V** Cloves
- ✓ Cocoa Nibs
- ✓ Crushed Red Pepper
- **M** Cumin
- **▼** Dill Seed
- ✓ Dill, Fresh
- ✓ Fennel, Ground
- ✓ Fenugreek
- **Ginger**
- ✓ Ginseng
- ✓ Marjoram
- Mustard Powder
- Mustard Seeds

- ✓ Nutmeg
- ✓ Oregano
- Paprika
- Pepper
- ✓ Rosemary
- ✓ Sage
- ✓ Spearmint, Fresh
- ✓ Sumac Spice
- ✓ Tarragon
- ▼ Thyme
- ✓ Turmeric
- ✓ Vanilla Bean
- ✓ Vanilla Extract
- ✓ Vinegar

SUGARS & SWEETENERS

- ✓ Cane Juice Crystals
- ✓ Crystallized Cane Juice
- ✓ Raw Sugar

OILS

- ✓ Avocado Oil
- ✓ Coconut Oil
- ✓ Corn Oil
- ✓ Flaxseed Oil
- **V** Peanut Oil
- ✓ Soybean Oil



PHYTATE INTOLERANCE

What are Phytates?

Phytates, or phytic acid, is found in edible seeds, grains, legumes, and nuts. It's an antinutrient that stores phosphorus in the seeds of plants. In cereal grains, phytate is found in the outer layer of the seed known as the bran. In legumes, phytate is present in the endosperm and embryo. The level of phytates within plant-based foods varies widely. In phytic acid-sensitive individuals the phytates can interfere with digestive enzyme processes and block absorption of key nutrients such as iron, zinc, calcium, magnesium, copper, chromium, and manganese.

Phytic acid is broken down by the enzyme phytase which is produced by certain types of bacteria. Very small amounts of phytase are produced in humans, while ruminants like cows produce much larger amounts which allows them to digest grains more effectively. Because humans produce very little phytase, consuming large amounts of foods high in phytic acid can contribute to a number of symptoms in sensitive individuals.

Phytate Intolerance Symptoms:

- Gas
- Bloating
- Fatique
- Rashes

- Constipation
- Joint Pain and Stiffness
- Mineral Deficiencies

Natural Support for Phytate Intolerance:

- Soaking and sprouting grains, legumes, and seeds for 12-24 hours prior to cooking helps break down phytic acid. It's also recommended to change the water every 3-4 hours while soaking. Note: When soaking grains, add one tablespoon of lemon juice or apple cider vinegar per cup of grains. Salt is optional.
- Phytic acid is degraded by heat, so pressure cooking or boiling can decrease the amount of phytic acid in foods. Remember to soak grains and legumes prior to cooking.

- Fermenting foods can break down phytic acid and make phosphorus more biogvailable.
- Some digestive enzyme supplements contain phytase, and you can somewhat increase your body's ability to produce phytase by eating a variety of fermented foods to support gut bacteria. However, it's still important to reduce consumption of foods high in phytic acid.

High Phytate Foods to Avoid

GRAINS & PSEUDO-GRAINS

- ✓ Amaranth
- ✓ Barley
- ✓ Barley Grass
- **M** Brown Rice
- ✓ Buckwheat
- **M** Bulgur
- ✓ Corn
- **V** Einkorn
- ✓ Farro
- **✓** Kamut
- ✓ Kasha
- **Oats**
- **Millet**
- ✓ Popcorn
- **V** Quinoa
- M Rice Bran
- ✓ Rye
- ✓ Sorghum
- ✓ Spelt
- **Wheat**
- ✓ Wheat Bran
- **Wheat Germ**
- **Wheatgrass**
- **Wild Rice**

LEGUMES & LENTILS

- ✓ Bean Sprouts
- ✓ Black Beans
- ✓ Black-Eyed Peas
- **M** Chickpea
- M Chili Beans
- ✓ Edamame
- ✓ Fava Beans
- ✓ Garbanzo
- **Great Northern Beans**
- **Green Peas**
- ✓ Kidney Beans
- ✓ Lentils
- ✓ Lima Beans
- **Mung Beans**
- Navy Beans
- Peanuts
- Peas, Green
- Peas, Snow
- Peas, Sugar Snap
- Pinto Beans
- **Soybeans**
- **Split Peas**
- ✓ Tofu

NUTS & SEEDS

- ✓ Almonds
- M Brazil Nuts
- ✓ Hazelnuts
- ✓ Peanuts
- Pumpkin Seeds
- ✓ Sesame Seeds
- **Walnuts**

TANNIN INTOLERANCE

What are Tannins?

Tannins are polyphenols which give foods their bitter, dry taste. In many foods, tannins may be helpful for their antiviral, antioxidant, and antimicrobial effects. However, in tannin-sensitive individuals, tannins act as an enzyme inhibitor that prevents adequate digestion, blocks nutrient absorption, and increases inflammation. A primary symptom of tannin intolerance is migraines.

Tannins can bind to dietary proteins, forming complexes that may be resistant to digestion. This binding may impact the digestion and absorption of proteins, reducing the amount of protein absorbed from foods. Tannins can also inhibit the activity of certain digestive enzymes, such as amylase and lipase, which are responsible for breaking down carbohydrates and fats. By interfering with enzyme function, tannins may hinder the digestion and absorption of nutrients from food.

Tannin Intolerance Symptoms:

Migraines

Nausea

• Fatigue

Abdominal Cramps

Diarrhea

Dizziness

Runny Nose

Congestion

Rashes

Itching

Natural Support for Tannin Intolerance:

There are a few ways to decrease the tannin content in foods:

- For fruits, vegetables, grains, and legumes, removing the outer layers, such as peeling or dehusking, can significantly reduce tannin content. This is particularly useful for foods like apples, tomatoes, quinoa, and certain beans.
- Soak grains and legumes for 10-12 hours before cooking to reduce the tannin content and improve digestibility. It's also recommended to change the water every 3-4 hours while soaking. Note: When soaking grains, add one tablespoon of lemon juice or apple cider vinegar per cup of grains. Salt is optional.
- Cooking foods, especially through boiling or simmering, can help break down tannins.

Herbs and spices high in tannins may be tolerated by some tannin-sensitive individuals since spices are usually not eaten in large quantities in one sitting. Avoid high-tannin spices when possible and use them sparingly when needed.

High Tannin Foods to Avoid

BEVERAGES

- ✓ Apple Cider
- ✓ Apple Juice
- **M** Beer
- ✓ Coffee
- ✓ Grape Juices
- **M** Guarana
- ✓ Red Wines
- **White Wines**
- √ Tea

LEGUMES & NUTS

- **✓** Almonds
- ✓ Hazelnuts
- **▼** Black Beans
- ✓ Chickpeas
- **V** Kidney Beans
- **V** Lentils
- **V** Peanuts
- **M** Pecans
- **V** Pinto Beans
- **M** Pistachio
- **Walnuts**

SEEDS

- ✓ Cacao
- **▼** Flax Seeds
- ✓ Hemp Seeds
- **V** Pumpkin Seeds
- ✓ Sesame Seeds
- **M** Sunflower Seeds

FRUITS

- ✓ Apples
- ✓ Apricot

- **✓** Banana
- **M** Blackberries
- ✓ Blueberries
- ✓ Cherries
- ✓ Cranberries
- Currants
- **Total**
- ✓ Gooseberries
- ✓ Grapes
- ✓ Kiwi
- ✓ Nectarine
- **M** Peach
- **V** Pears
- **V** Plums
- Pomegranate
- ✓ Raspberries
- ✓ Strawberries

VEGETABLES

- ✓ Avocado
- ✓ Cucumber
- ✓ Edamame
- **M** Garlic
- ✓ Okra
- **☑** Olives, Black
- **Olives, Green**
- **M** Onions
- **V** Pumpkin
- **▼** Rhubarb
- ✓ Tomato
- **Winter Squash**
- ✓ Yellow Squash
- ✓ Zucchini

HERBS & SPICES

- ✓ Allspice
- **M** Anise
- ✓ Apple Cider Vinegar
- **▼** Basil
- ✓ Bay Leaves
- ✓ Carob Powder/Flour
- Cardamom
- ✓ Cayenne Pepper
- Celery Seed
- ✓ Chili Powder
- **V** Cilantro
- **M** Cinnamon
- ✓ Cloves
- ✓ Cocoa Nibs
- ✓ Cocoa Powder
- **V** Coriander
- Crushed Red Pepper
- **V** Cumin
- ✓ Curry Powder
- ✓ Dill Seed
- M Garlic Powder
- **Marjoram**
- ✓ Mustard Seeds
- ✓ Nutmeq
- ✓ Onion Powder
- Oregano
- Paprika
- Paprika, Smoked
- Parsley
- Peppercorn
- Rosemary
- ✓ Saffron
- ✓ Sage

- ✓ Spearmint, Fresh
- ✓ Sumac Spice
- ✓ Tarragon
- **M** Thyme
- **☑** Turmeric
- ✓ Vanilla Bean
- ✓ Vanilla Extract
- ✓ Vinegars

MISCELLANEOUS

- ✓ Alfalfa
- **M** Barley
- ✓ Chocolate
- ✓ Carob
- ✓ Smoked Foods
- ✓ Cheese with Coloring

SUGARS & SWEETENERS:

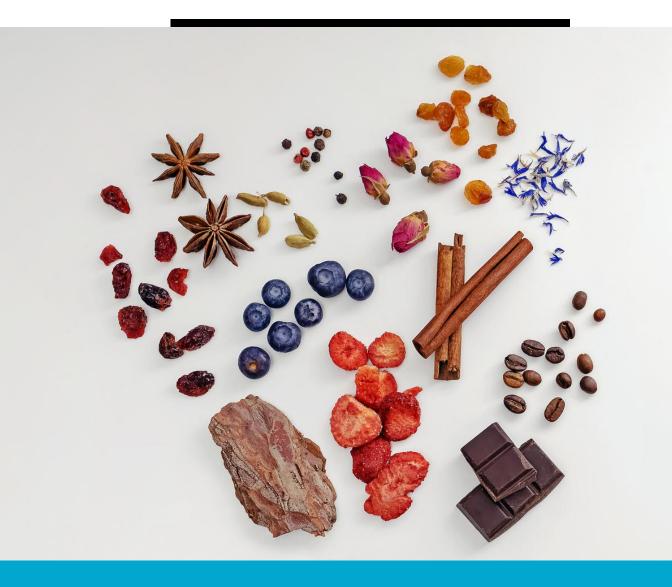
- ✓ Barley Malt
- ✓ Maple Syrup

GRAINS & PSEUDOGRAINS

- ✓ Barley
- ✓ Corn
- ✓ Millet
- **V** Quinoa
- **▼** Rye
- ✓ Sorghum

OILS

- ✓ Avocado Oil
- **M** Canola Oil
- ✓ Corn Oil
- ✓ Grapeseed Oil
- **✓** Safflower Oil



TYRAMINE INTOLERANCE

What is Tyramine?

Tyramine is a naturally occurring compound found in various foods and beverages, particularly those that undergo fermentation or aging processes. It belongs to the group of biogenic amines and is formed through the decarboxylation of the amino acid tyrosine. Tyramine is commonly found in aged or fermented foods, including certain cheeses, cured meats, pickled or fermented products, and alcoholic beverages. Some fruits and vegetables contain tyramine, though in lower concentrations.

Tyramine can cause symptoms in tyramine-sensitive individuals and can be of concern for those taking certain medications, such as monoamine oxidase inhibitors (MAOIs), which can interfere with the breakdown of tyramine in the body. Tyramine intolerance can cause a variety of symptoms, with headaches and migraines being the most common symptoms.

Symptoms of Tyramine Intolerance:

- Headaches or Migraines
- Joint Pain and Stiffness
- Elevated Blood Pressure
- Heart Palpitations
- Nausea

- Anxiety
- Restlessness
- Sweating
- Flushing or Redness

Natural Support for Tyramine Intolerance:

Here are some tips to reduce tyramine consumption:

- Opt for fresh foods over aged or fermented ones. Fresh fruits, vegetables, and meats generally have lower tyramine levels compared to their aged or fermented counterparts.
- For fruits and vegetables, consider peeling or trimming parts that may have higher tyramine concentrations, such as the skin or outer leaves.
- Consume freshly prepared foods and avoid leftovers, as tyramine levels can increase during storage and as foods age.

- Use cooking methods such as boiling, poaching, or steaming. These methods are generally better at lowering tyramine than methods like grilling or fermenting.
- Use fresh herbs and spices in cooking instead of fermented or aged condiments, like soy sauce or miso.

High Tyramine Foods to Avoid

MEATS & POULTRY

- **M** Bacon, Pork
- ✓ Bacon, Turkey
- ✓ Beef Jerky
- ✓ Bologna
- ✓ Chorizo
- **✓** Ham
- ✓ Pancetta
- **V** Pepperoni
- ✓ Prosciutto
- **▼** Salami
- ✓ Sausage, All
- ✓ Soppressata

NUTS

- **M** Almonds
- M Black Walnuts
- M Brazil Nuts
- ✓ Cashews
- ✓ Chestnuts
- ✓ Coconut
- **M** Hazelnuts
- **Kola Nuts**
- **Macadamia** Nuts
- **M** Pecans
- Pili Nuts
- ✓ Pine Nuts
- **M** Pistachios
- **Tiger Nuts**
- **Walnuts**

OTHER

- M Brewer's Yeast
- **Miso**

- ✓ Soy Sauce
- ✓ Tofu

SEAFOOD

M Caviar

BEVERAGES

- ✓ Beer
- ✓ Black Tea
- ✓ Coffee
- ✓ Coffee, Decaf
- ✓ Kombucha
- M Red Wine
- ✓ Rooibos Tea
- Yerba Mate

LEGUMES

- ✓ Fava Beans
- ✓ Lima Beans
- Snow Peas

FRUITS

- **M** Banana
- M Dried Fruit, All
- Oranges
- Grapes
- **M** Grapefruit
- **V** Kumquat
- ✓ Lemon
- **V** Lime
- **Mectarine**
- ✓ Papaya
- ✓ Raisins, Grape
- **V** Tangerine

VEGETABLES

- ✓ Avocado
- **M** Beets
- **Kimchi**
- **M** Pickled Beets
- Pickled Cucumbers
- **Sauerkraut**
- ✓ Tomato

DAIRY

- ✓ Ayran
- **▼** Camembert
- **M** Cheddar Cheese
- Cheese Curds
- ✓ Cottage Cheese
- **V** Feta
- **M** Gorgonzola
- ✓ Greek Yogurt
- ✓ Gruyere
- ✓ Kefir
- ✓ Mozzarella
- **V** Parmesan
- Provolone Cheese
- **Ricotta**
- **Sour Cream**
- **M** Romano Cheese
- Swiss Cheese
- ✓ Yogurt

CHOCOLATE

- ✓ Baking Chocolate
- M Bittersweet Chocolate
- Dark Chocolate
- Milk Chocolate

- ▼ Ruby Chocolate
- ✓ Semisweet Chocolate
- ✓ White Chocolate

SEEDS

- ✓ Chia Seeds
- ✓ Flax Seeds
- ✓ Hemp Seeds
- ✓ Poppy Seeds
- ✓ Pumpkin Seeds
- ✓ Sesame Seeds
- ✓ Sunflower Seeds



SULFITE AND NITRATE INTOLERANCE

What are Sulfites and Nitrates?

Sulfites and nitrates are food additives commonly used in the food industry for various purposes, including preservation, flavor enhancement, and color stabilization.

Sulfites are sulfur-containing compounds commonly used as preservatives and antioxidants in a wide range of food and beverage products. Some individuals may experience sulfite sensitivity or intolerance, which can manifest as symptoms like headaches, respiratory issues, hives, or digestive problems. Sulfite intolerance is more common in individuals with asthma.

Nitrates are commonly used in cured and processed meats, such as bacon, ham, and hot dogs. They serve multiple functions, including preserving the meat, enhancing flavor, and contributing to the characteristic pink color. However, during cooking or digestion, nitrates can react with amines in the meat to form nitrosamines, which are potentially carcinogenic compounds. Some individuals may be sensitive or allergic to sulfites or nitrates, with headaches often being a primary symptom.

Sulfite and Nitrate Intolerance Symptoms:

- Headaches or Migraines
- Hives
- Itching
- Rashes
- Sneezing

- Congestion
- Cough
- Bloating
- Gas
- Respiratory Issues

Natural Support for Sulfite and Nitrate Intolerances:

Use these tips to reduce exposure to sulfites and nitrates:

 Fresh fruits, vegetables, and unprocessed meats have lower sulfite levels compared to processed and packaged foods. Processed and packaged foods, especially those with a long shelf life, may contain sulfites for preservation purposes. Choosing fresh, whole foods can help minimize sulfite intake.

- Check food labels for ingredients that contain sulfites or sulfur-based compounds. Watch for additives such as sodium bisulfite or sulfur dioxide.
- Sulfites and nitrates are most often added to packaged foods, so choose brands that do not use these ingredients. Look for things like "Nitrate-Free", "No Nitrates Added", "Sulfite Free", and "No Sulfites".

High Sulfite Foods to Avoid

MEAT

Some brands or processed meats like bacon and deli meat are free of these additives, check labels

- ✓ Bacon, Pork
- ☑ Bacon, Turkey
- ✓ Beef Jerky
- **☑** Bologna
- ✓ Chorizo
- **M** Ham
- ✓ Hot Dogs
- ✓ Pancetta
- ✓ Pepperoni
- **M** Prosciutto

- ✓ Salami
- ✓ Sausage
- ✓ Soppressata

BEVERAGES

- **V** Beer
- ✓ Red Wine
- **White Wine**

MISCELLANEOUS

- ✓ Dried Fruits, All (Choose Sulfite-Free)
- ✓ Condiments (Check Labels)

High Nitrate Foods to Avoid

MEATS & POULTRY

Some brands or processed meats like bacon and deli meat are free of these additives, check labels

- ✓ Bacon, Pork
- Bacon, Turkey
- ✓ Beef Jerky
- **☑** Bologna
- ✓ Chorizo
- Ham
- ✓ Hot Dogs
- ✓ Pancetta
- ✓ Pepperoni
- ✓ Prosciutto
- ✓ Salami

- ✓ Sausage
- ✓ Soppressata

NUTS & HERBS

- ✓ Almonds
- Parsley

FRUIT

- ✓ Apples
- ✓ Grapes
- ✓ Oranges

VEGETABLES:

- ✓ Lettuce, Red Leaf
- ✓ Lettuce, Butterhead
- ✓ Arugula

- ✓ Beets
- ✓ Broccoli
- ✓ Broccolini
- ✓ Brussels Sprouts
- ✓ Cabbage
- ✓ Carrots
- **M** Cauliflower
- ✓ Celery
- ✓ Green Beans
- ✓ Radish
- ✓ Sauerkraut
- ✓ Spinach

OXALATE INTOLERANCE

What are Oxalates?

Oxalates, or oxalic acid, is an organic compound found in many leafy greens, vegetables, fruits, cocoa, nuts, and seeds. In plants, it's a defense mechanism to protect it against predators like herbivores and insects. Oxalates are notable for their potential impact on mineral absorption, particularly calcium. When oxalates form insoluble complexes with calcium, they create crystals known as calcium oxalate.

These crystals are not easily absorbed in the digestive tract and can contribute to the formation of kidney stones. Foods high in oxalates can also contain compounds that can bind with iodine and affect its absorption, potentially contributing to thyroid imbalances. Oxalate sensitive individuals often have joint or muscle pain but can experience different symptoms to varying degrees.

Oxalate Intolerance Symptoms:

- Bloating
- Gas
- Fatigue
- Muscle Soreness
- Kidney Stones

- Gallstones
- Abdominal Pain
- Joint Pain and Stiffness
- Thyroid Imbalances

Natural Support for Oxalate Intolerance:

Here are a few ways to reduce the oxalate content of some foods:

- The skin and outer layers of foods typically contain higher amounts of oxalates, so peel foods when possible.
- Soak grains and legumes for 10-12 hours before cooking to reduce the oxalate content and improve digestibility. It's also recommended to change the water every 3-4 hours while soaking. Note: When soaking grains, add one tablespoon of lemon juice or apple cider vinegar per cup of grains. Salt is optional.
- Cooking foods, especially through boiling or simmering, can break down oxalates and make them less potent. Proper cooking is crucial for foods like spinach and beets, which are particularly high in oxalates.

High Oxalate Foods to Avoid

FRUITS

- ✓ Avocados
- **M** Dates
- **V** Figs
- **M** Grapefruit
- **V** Kiwi
- **Oranges**
- **Y** Pineapple
- **M** Prunes
- **M** Raspberries
- **Tangerine**

NUTS & SEEDS

- **M** Almonds
- **V** Cashews
- **M** Peanuts
- ✓ Pecans
- **V** Pumpkin Seeds
- ✓ Sesame Seeds
- ✓ Sunflower Seeds
- **Tahini**
- **Walnuts**

LEGUMES & LENTILS

- M Black Beans
- **M** Chickpeas
- ✓ Fava Beans
- **Material** Great Northern Beans
- **V** Lentils
- **V** Navy Beans
- Red Kidney Beans
- Refried Beans
- **Soybeans**
- **White Beans**

VEGETABLES

- ✓ Artichoke
- Asparagus
- **M** Beets
- ✓ Carolina Reaper
- **M** Carrots
- **M** Chard
- **V** Collard Greens
- **M** Dandelion Greens
- ✓ Escarole
- ✓ Leeks
- **Mustard Greens**
- ✓ Okra
- ✓ Olives, Black
- ✓ Olives, Green
- Parsley
- Parsnips
- ✓ Pepper, Spicy
- Potato, White
- **M** Rhubarb
- ✓ Rutabaga
- **Spinach**
- Summer Squash
- ✓ Sweet Potatoes
- ✓ Swiss Chard
- ✓ Tomatoes
- ✓ Turnips
- **Yam**

BEVERAGES

- **V** Beer
- ✓ Carrot Juice
- Chocolate Drinks
- ✓ Soy Milk
- ✓ Tea
- ▼ Tomato Juice

GRAINS & PSEUDO-GRAINS

- ✓ All-Purpose Flour
- **M** Brown Rice
- M Buckwheat
- **W** Bulgur
- Corn Grits
- **V** Cornmeal
- ✓ Couscous
- ✓ Millet
- ✓ Rice Bran
- ✓ Soy Flour
- **Wheat**
- **Wheat Bran**
- **Wheat Germ**
- **White Rice**

HERBS & SPICES

- ✓ Allspice
- ✓ Celery Seed
- **Cinnamon**
- ✓ Clove
- ✓ Coriander Seed
- ✓ Cumin Seed
- ✓ Curry
- ▼ Fennel Seed
- Ginger, Dried
- ✓ Onion Powder
- ✓ Turmeric

MISCELLANEOUS

- ✓ Carob
- ✓ Chocolate

GOITROGEN INTOLERANCE

What are Goitrogens?

Goitrogens are antinutrients that serve as defense mechanisms for plants against herbivores and pests. Goitrogenic compounds, such as glucosinolates found in cruciferous vegetables, act as natural pesticides to deter or inhibit the feeding and survival of herbivores. The term "goitrogenic" is derived from the potential impact these compounds can have on the thyroid gland in animals that consume large amounts of goitrogenic plants.

Goitrogens can interfere with the normal function of the thyroid gland by impeding the uptake of iodine. The thyroid gland requires iodine to produce thyroid hormones, which play a crucial role in regulating metabolism. Foods containing goitrogens are known to be capable of affecting the thyroid, particularly in goitrogen-sensitive individuals when consumed in large quantities, or when iodine intake is insufficient.

Goitrogen Intolerance Symptoms:

- Fatigue
- Irritability
- Mood Swings
- Bloating
- Gas
- Abdominal Pain

- Constipation
- Diarrhea
- Thyroid Imbalances
- Hair Loss
- Poor Body Temperature Regulation
- Heart Palpitations

Natural Support for Goitrogen Intolerance:

Here are some practical ways to decrease goitrogen consumption:

- Cooking foods can significantly decrease their goitrogenic potential. Boiling, steaming, roasting, or microwaving can break down goitrogens, making them less potent. Boiling is particularly effective, as goitrogens are water-soluble.
- Peeling or discarding outer leaves of certain vegetables can reduce goitrogen levels, as these compounds are often concentrated in the outer layers.
- Adequate iodine intake can help counteract the goitrogenic effects of certain foods. Including iodine-rich foods in the diet, such as seafood, can support thyroid function.

High Goitrogen Foods to Avoid

NUTS

- **V** Peanuts
- **M** Pine Nuts

SEEDS

✓ Flax Seeds

FRUITS

- **M** Peach
- ✓ Strawberry

HERBS & SPICES

- ✓ Mustard Powder
- Mustard Seeds

OILS

- **V** Canola Oil
- ✓ Flaxseed Oil
- M Peanut Oil
- ✓ Soybean Oil

BEVERAGES

✓ Green Tea

- ✓ Oolong Tea
- **M** Red Wine
- **White Tea**

GRAINS & PSEUDOGRAINS

- ✓ Corn
- ✓ Couscous
- **V** Einkorn
- ✓ Farro/Emmer
- ✓ Kamut
- **Millet**
- ✓ Sorghum
- ✓ Spelt
- Triticale
- **Wheat**
- **Wheat Germ**

LEGUMES

- ✓ Lima Beans
- ✓ Peanuts
- ✓ Soybeans

VEGETABLES

- ✓ Bok Choy
- ✓ Broccoli
- ✓ Broccolini
- Brussels Sprouts
- ✓ Cabbage
- ✓ Cassava
- ✓ Cauliflower
- **Collard Greens**
- ✓ Edamame
- ✓ Horseradish
- ✓ Kale
- ✓ Kohlrabi
- **Mustard Greens**
- **M** Radish
- ✓ Rutabaga
- **Spinach**
- ✓ Sweet Potatoes
- ✓ Turnip
- ✓ Wasabi
- **Watercress**



