

ELIMINATION DIET

Comprehensive Guide



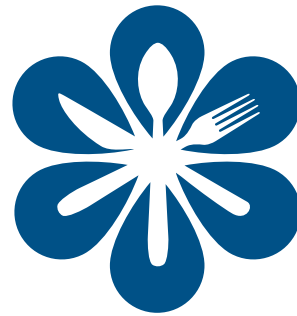


Table of Contents

Why the Elimination Diet?	3
Features of the Elimination Diet	4
Touring Through the Food Plan.....	10
Getting Started.....	17
Helpful Hints	18
The Role of Anti-inflammatory Foods in the Elimination Diet.....	19
Guidelines for Reintroducing Foods	22
Frequently Asked Questions.....	25
Resources and Tools for Success ..	29

Why the Elimination Diet?

Symptoms and conditions that have failed to respond to conventional medical therapy may resolve when a person follows the IFM Elimination Diet. Specific foods or foods eaten frequently may be related to a long list of health conditions, including digestive problems, headaches, chronic sinus drainage, low energy, depression, mood swings, eczema, skin irritations, joint aches, asthma, weight gain, and others. People may suffer from these symptoms for long periods of time without realizing that they can be connected to the foods they are eating. Often it isn't until a food is removed that the connection between symptoms and foods can be made. The Elimination Diet removes common foods that may be causing symptoms and, with reintroduction, helps patients identify the foods that may be triggering their symptoms.

Often, symptoms that have failed to respond to conventional medical therapy will resolve by following the Elimination Diet. After the initial period of eliminating foods, many chronic symptoms should improve or disappear. When the burden on the immune system is decreased, the body has an opportunity to heal. During the elimination period, it is important to make sure that the diet is still enjoyable and nutrient-dense. The road to optimum health starts with decreasing the burden on the immune system while ensuring adequate nutrition.

After completion of the three-week Elimination Diet, patients will undergo a food reintroduction process. The goal is to expand the variety of healthy foods available to an individual for daily intake. Reintroduction involves adding back one food at a time and observing whether that food is associated with negative symptoms. Foods that continue to provoke symptoms (physical, mental, and emotional) are avoided for an additional three to six months, at which time reintroduction is attempted again. Once the gut is healed, many foods that initially caused sensitivities may be reintroduced into a meal plan without symptoms. Healing the gut, and being able to successfully reintroduce foods is important, as eating the same few foods day after day does not provide the body with the full array of phytonutrients necessary for overall health. A diet with a large diversity of foods helps ensure that the body gets essential nutrients and is especially important for those who have digestive issues.



Features of the Elimination Diet

- **Identifies food triggers:** Many people with food sensitivities don't realize how bad they feel, or that particular foods are the culprit, until the foods that trigger a reaction are removed from the diet. Food reactions are frequently overlooked as a contributor to chronic health issues. Some reactions are considered to be food **allergies**, which cause severe symptoms immediately after a trigger food is eaten. Some reactions may be delayed by hours or even days; this type of adverse food reaction is referred to as a food **sensitivity**. Food sensitivities are usually the result of an imbalance in the gastrointestinal system that affects the immune system. Food **intolerances** can be the result of reactions to certain chemicals in food (e.g., MSG or histamine). They can also occur when a person lacks an enzyme necessary to digest the food, such as lactase which is needed to digest milk products.



These adverse food reactions are common when the same foods are eaten day after day, resulting in greater sensitization to these foods. If a person keeps eating the foods they are sensitive to, digestion and absorption may be impaired. Additionally, those with weakened immune systems may be more prone to food sensitivities. The Elimination Diet is a useful tool for diagnosing adverse food reactions, whether true allergy, intolerance, or sensitivity.

The Elimination Diet guides individuals to include or exclude certain foods. Those foods that are avoided are those generally eaten often, even several times daily, including wheat and other gluten-containing grains, dairy, refined and artificial sweeteners, corn, beef, pork, eggs, and soy. Because wheat, corn, and soy are commonly added to many processed food products, we are often not aware of the extent of these foods in our diets. Fast foods and other highly processed prepared foods contain a variety of pro-inflammatory chemicals that add to the toxic burden on the liver, so these are also avoided.

- **Reduces inflammation:** Food reactions of any type can trigger low-grade inflammatory reactions in the gut, making the intestinal wall more porous and exposed to the influx of large, undigested food particles into the blood (a condition referred to as “leaky gut”). This breakdown of the intestinal barrier can allow other substances like bacteria, chemicals, and yeast to leak from the intestine into the bloodstream, further stimulating the immune system and causing more inflammation. Just as food reactions can lead to leaky gut, the reverse is also true; leaky gut can significantly increase the development of food sensitivities. Removing problem foods decreases inflammation and helps calm the immune response.

The Elimination Diet helps to reduce inflammation by promoting the ingestion of anti-inflammatory foods. Over time, these foods, combined with the elimination of common trigger foods, causes inflammation to subside and helps the gut to heal. This allows the immune system to begin to work properly again. It also fosters an improved immune response to airborne contaminants and allergens, industrial contaminants, viruses, parasites, and bacteria—which means that individuals will be less affected by toxins and infections, making them sick less often.

Features of the Elimination Diet

The intestinal lining is made of cells that replace themselves approximately every two to four days. This means that, in the span of a single week, every cell in the intestinal lining is broken down or sloughed off and a new cell grows to take its place. Removing from the diet potentially harmful foods and those that cause inflammation, while at the same time supplying the body with healthy, anti-inflammatory whole foods (especially those containing healthy fats, fiber, and an array of phytonutrients) makes this newly-formed gut tissue stronger and healthier.

- **Supports healthy microbiome:** Much of one's overall health is determined by the health of the gut. More than 70% of the immune system is clustered around the digestive tract. The gut immune system is constantly assessing things that are ingested or inhaled into the digestive tract. The way the immune system responds is impacted by the flora that inhabit the gut. The normal flora, also referred to as the microbiome, help regulate the immune response.

When the gut is inflamed, the balance of beneficial versus non-beneficial microbes is thrown off. This results in improper stimulation of the immune response and can cause adverse symptoms. Providing essential nutrients for healing is a critical factor in creating a healthy microbiome as well as a healthy immune response. Eliminating certain foods decreases inflammation, which allows the gut, and ultimately the immune system, to heal. Additionally, a healthy gut microbiome can be rebuilt by eating healthy whole foods, especially those high in protein, phytonutrients, probiotics, and prebiotics. These foods are the basis of the Elimination Diet.

- **Dairy-free, gluten-free:** Because of their frequent association with adverse food reactions, dairy products are omitted on the Elimination Diet. Some of the trouble with dairy is due to the presence of lactose, a milk sugar. The lactose present in fresh milk and in many other commercially available dairy products can cause painful gas, bloating, and digestive upset, especially in those who lack adequate lactase, the enzyme needed to properly digest lactose. It is estimated that somewhere between 25% and 90% of the world's population is lactase-deficient to some extent.

Fermented dairy products like yogurt and sour cream are largely free of lactose, but these products contain casein, a milk protein that can also cause adverse reactions. There are different types of casein (A1 and A2 beta casein) in milk, depending on the type of cow (e.g., Holstein, Jersey, or Guernsey), and this too may impact tolerance. However, researchers are continuing to investigate the role these casein proteins play in allergies, intolerances, and intestinal permeability. Until science clarifies the debate surrounding the different types of casein, all dairy products are avoided while on the Elimination Diet.



Features of the Elimination Diet

Also eliminated on this plan is gluten. Gluten is a sticky, water-soluble family of proteins found in a few key grains (barley, rye, and wheat) and associated grain products (breads, cereals, crackers, pastas, etc.). Toxic proteins in gluten called gliadins can break down the microvilli (finger-like protrusions of intestinal cells) in the small intestine. This deterioration can cause leaky gut, food allergies, sensitivities, intolerances, and other digestive disturbances or autoimmune conditions. Some people respond well after gluten is removed from the diet, even in the absence of the usual gastrointestinal symptoms associated with gluten intolerance. A growing body of evidence links gluten exposure to neurological symptoms including depression, fatigue, migraines, and brain fog, which may seem to be unrelated to food intake. However, given that many neurotransmitters are produced in the gut, the link between overall gut health and brain health is undeniable.

Examples of dairy products and grains that are avoided on the Elimination Diet are shown in the table below. Note that all products containing these foods as ingredients are also excluded from the plan.

Dairy Products	Grains (gluten-containing)
Butter	Barley
Cheese (all)	Bulgar
Heavy cream	Oats*
Half and half	Rye
Ice cream	Seitan
Kefir	Triticale
Milk	Wheat (farro, kamut, spelt, and all other varieties)
Sour cream	
Yogurt	

*Oats, even those that are labeled as gluten-free, are often processed in the same facility as gluten-containing grains and can become contaminated with gluten during processing. Additionally, even certified gluten-free oats that are never exposed to gluten can cause symptoms in some patients with celiac disease and gluten intolerance, as the protein structure found in oats is similar to that of gliadin. For this reason, patients should follow their practitioner's advice when reintroducing oats back into their diets.



Features of the Elimination Diet

- **Phytonutrients to heal the gut:** The Elimination Diet contains a broad variety of colorful vegetables and fruits. These plant foods provide a complex array of essential nutrients, called phytonutrients and antioxidants, that promote healing and detoxification in the gut, liver, and kidney. Antioxidants provide protection against free radicals (molecules that can damage cells), which often form during detoxification. Plant foods help alkalize the body, improving excretion of toxins by the kidneys. Phytonutrients also play an active role in improving the stress response and reducing inflammation.

Colorful fresh fruits contain phytonutrients, but they also have natural sugar. In general, our taste buds are more responsive to sweet foods, which often leads to people eating more fruits than vegetables. This food plan emphasizes incorporating more vegetables than fruits in the diet in order to avoid excessive intake of natural sugars.

- **Reduces toxic burden:** Our food supply has become compromised by the addition of artificial colorings, flavorings, additives, and preservatives, not to mention the pesticides, insecticides, and herbicides in conventionally grown produce, whole grains, nuts, seeds, and legumes. Perhaps one of the biggest nutritional burdens in our society is the amount of sweeteners in highly processed prepared foods. Eating a “cleaner” diet by avoiding problem foods can help increase the liver’s ability to eliminate toxins. In addition to avoiding potentially reactive foods and products that may be toxic, the Elimination Diet promotes the consumption of organic foods to lower the toxic burden in the body. It also encourages grass-fed, pasture-raised, and free-range sources of animal protein, as they are higher in healthy omega-3 fatty acids than their corn-fed and caged counterparts.



A person’s toxic burden is a result of three main factors:

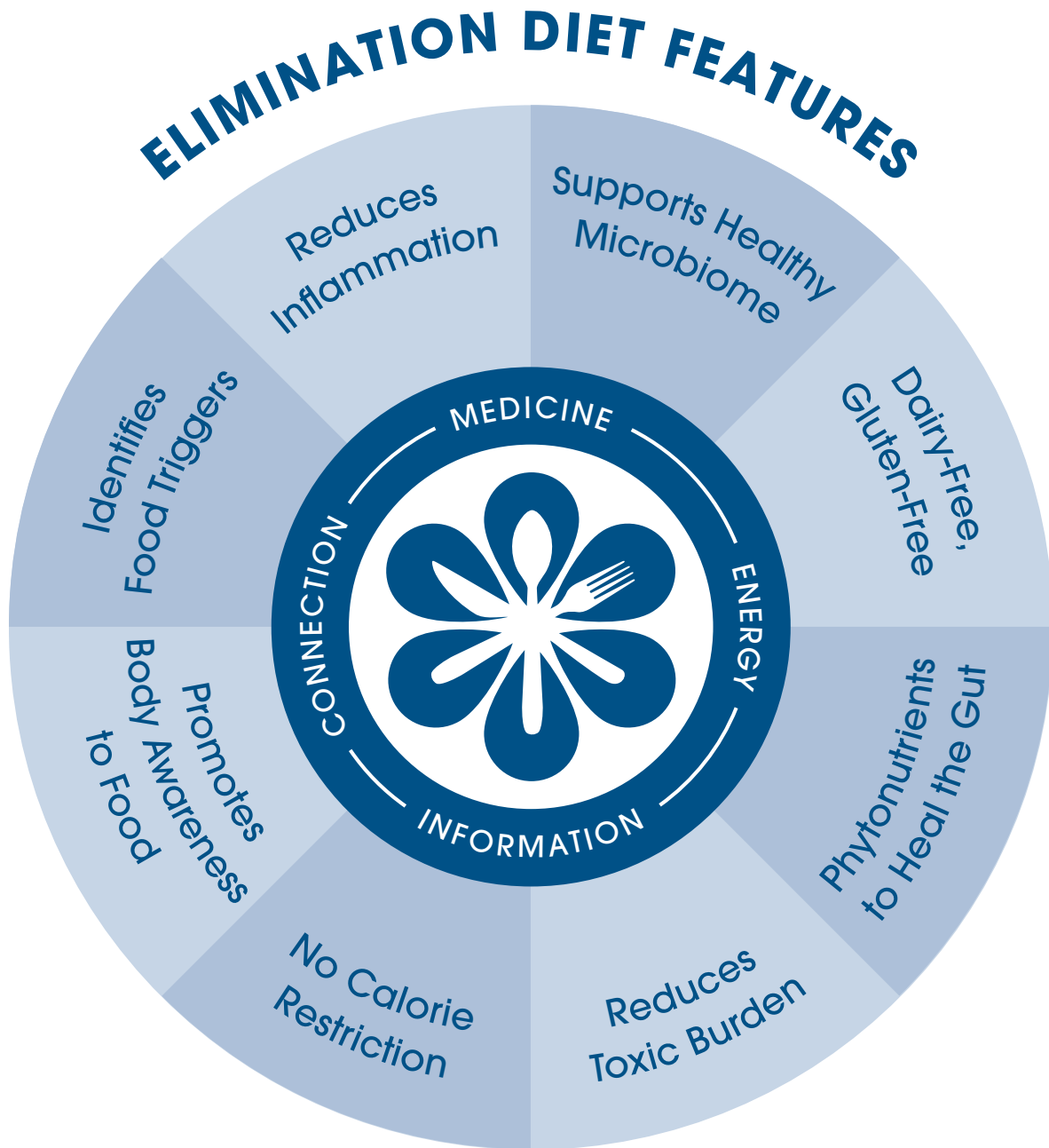
- **Genetics:** predisposition for effective production of detoxification enzymes needed to process toxic compounds or substrates is unique and depends on familial influence.
- **Toxins:** exposure can occur through both internal and external sources.
- **Diet:** a diet rich in detoxification nutrients and phytonutrients will promote the body’s ability to eliminate toxic substances.

Features of the Elimination Diet

While there is great emphasis in this food plan on reducing the intake of toxins of all kinds, the elimination of accumulated toxins present in the body is equally important. Several metabolic pathways in the body are responsible for converting toxins into chemical compounds, allowing toxin elimination primarily through urine, stool, and sweat. Many different nutrients are required to fuel the process of detoxification. A shortage or deficiency of any one of them could result in an increased toxic load or toxic burden. Lowering the body's toxic burden by eating clean, whole foods will assist the liver in converting toxins stored in the body's fat cells into intermediate metabolites that can then be excreted through the urine and stool. Intake of high-fiber foods with adequate hydration is essential to ensure elimination of these transformed toxins.

- **No calorie restriction:** Weight loss is not a goal of this food plan, but it may (or may not) happen when the body comes back into balance. As a result, calorie control and inclusion of specific food groups are optional. Thus the Elimination Diet is not as restrictive as some dietary regimens. However, it is essential that patients eat only the foods that appear on the Elimination Diet food list.
- **Promotes body awareness to food:** After the initial phase of the Elimination Diet, the person 'challenges' certain foods during a reintroduction phase. This helps identify any problem foods that continue to cause symptoms. During the reintroduction phase, many patients develop an increasing awareness of foods that trigger symptoms in the body. Being on the Elimination Diet for even a few weeks can lead to changes in the taste buds and a greater level of sensitivity about which foods cause changes in the body. Symptoms that are currently a problem are likely to improve during the Elimination Diet, although there can be an initial period of worsening symptoms. As the avoided foods are carefully brought back into an eating plan, patients can see what foods may trigger the symptoms experienced prior to the Elimination Diet. Overall, patients will notice that they are much more in touch with their body's responses to foods after the Elimination Diet.





Touring Through the Food Plan

The two-page Elimination Diet Food Plan provides a snapshot of the foods that are available to choose from every day. A general description of food categories is helpful before beginning the process of avoiding foods that may be causing problems.

Elimination Diet Food Plan

PROTEINS	DAIRY ALTERNATIVES	FATS & OILS	FATS
<p>Servings/day _____</p> <p>Lean, free-range, grass-fed, organically grown animal proteins; non-GMO, organic plant proteins; and wild-caught, low-mercury fish preferred.</p> <p>Animal Proteins:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Fish: Halibut, herring, mackerel, salmon, sardines, tuna, etc.—1 oz <input type="checkbox"/> Meat: All wild game, buffalo, elk, lamb, venison—1 oz <input type="checkbox"/> Poultry (skinless): Chicken, Cornish hen, turkey—1 oz <p>1 serving as listed = 35–75 calories, 5–7 g protein, 3–5 g fat, 3–4 g carbs</p> <p>Eliminate</p> <p>Beef/wild, cured meats, cold cuts, eggs, frankfurters, pork, shellfish, whey, soy (miso, natto, tempeh, tofu, fermented vegetable protein)</p>	<p>Servings/day _____</p> <p>Unsweetened, organic preferred</p> <ul style="list-style-type: none"> <input type="checkbox"/> Kefir: Coconut (glain) ●▲—4–6 oz <input type="checkbox"/> Milk: Almond, coconut, flaxseed, hazelnut, hemp, rice—8 oz <p>1 serving = 25–60 calories, 1–9 g protein, 1–4 g carbs (nutritional values vary)</p> <p>Eliminate</p> <p>Butter, cheese, cottage cheese, cream, frozen yogurt, ice cream, milk, non-dairy creamers, soy milk, yogurt (dairy and soy), whey</p>	<p>Servings/day _____</p> <p>Minimally refined, cold-pressed, organic, non-GMO preferred</p> <ul style="list-style-type: none"> <input type="checkbox"/> Avocado ●●-2 T or ½ whole <input type="checkbox"/> Coconut milk, regular (canned)—1/5 T <input type="checkbox"/> Coconut milk, light (canned)—3 T <input type="checkbox"/> Coconut milk, light (extra virgin) <input type="checkbox"/> Olive ●● Black, green, kalamata—8 <input type="checkbox"/> Oil, cooking: Avocado, coconut, grapeseed, olive (extra virgin), rice <p>1 serving = 40 calories, 5g fat</p> <p>Eliminate</p> <p>Butter, corn oil, cornflower oil, margarine/ spreads, mayonnaise, peanut oil, shortening, soybean oil</p>	<p>Servings/day _____</p> <p>Unsweetened, unsalted, organic preferred</p> <ul style="list-style-type: none"> <input type="checkbox"/> Almonds—6 <input type="checkbox"/> Brazil nuts—2 <input type="checkbox"/> Cashews ●-6 <input type="checkbox"/> Chia seeds—1 T <input type="checkbox"/> Coconut (dried)—1 T <input type="checkbox"/> Flaxseed (ground)—2 T <input type="checkbox"/> Hazelnuts—5 <input type="checkbox"/> Hemp seeds—1 T <input type="checkbox"/> Macadamias—2.3 <input type="checkbox"/> Sunflower seeds ●-1 T <input type="checkbox"/> Walnut halves ●-4 <p>1 serving = 40 calories, 5 g fat</p> <p>Eliminate</p> <p>Mixed nuts (with peanuts), peanuts, peanut butter</p>
<p>Servings/day _____</p> <p>Organic, non-GMO preferred</p> <ul style="list-style-type: none"> <input type="checkbox"/> Bean sprouts—½ c <input type="checkbox"/> Dried beans, peas, or lentils (cooked)—½ c <input type="checkbox"/> Flour, legume—½ c <input type="checkbox"/> Green peas (cooked)—½ c <input type="checkbox"/> Hummus or other bean dip—½ c <input type="checkbox"/> Refried beans, vegetarian—½ c <p>1 serving = 90–110 calories, 3–7 g protein, 10 fat, 15 g carbs</p> <p>Eliminate</p> <p>Soybean products (edamame, miso, soy sauce, tamari, tempeh, tofu, soy milk, soy yogurt, textured vegetable protein)</p>	<p>Servings/day _____</p> <p>Unsweetened, no sugar added</p> <ul style="list-style-type: none"> <input type="checkbox"/> Apple—1 sm <input type="checkbox"/> Apricots—4 <input type="checkbox"/> Bananas—½ med <input type="checkbox"/> Blackberries—½ c <input type="checkbox"/> Blueberries—½ c <input type="checkbox"/> Dried fruit ● (no sulfites)—2 T <input type="checkbox"/> Figs—3 <input type="checkbox"/> Grapes—1.5 <input type="checkbox"/> Grapefruit—½ med <input type="checkbox"/> Juices (diluted)—½ c <input type="checkbox"/> Kiwi—1 med <input type="checkbox"/> Kumquats—4 <input type="checkbox"/> Lemons—1 <input type="checkbox"/> Limes—1 <input type="checkbox"/> Tangerines—2 sm <p>1 serving = 60 calories, 15 g carbs</p> <p>Eliminate</p> <p>Crusts, fruits (if directed by your healthcare provider)</p>	<p>Servings/day _____</p> <p>Unsweetened, no sugar added</p> <ul style="list-style-type: none"> <input type="checkbox"/> Melon, all—1 c <input type="checkbox"/> Mango—½ sm <input type="checkbox"/> Nectarines—1 sm <input type="checkbox"/> Oranges—1 med <input type="checkbox"/> Papaya—1 c <input type="checkbox"/> Peach—1 sm <input type="checkbox"/> Pear—1 sm <input type="checkbox"/> Persimmon—½ <input type="checkbox"/> Pineapple—½ c <input type="checkbox"/> Plums—2 sm <input type="checkbox"/> Pomegranate seeds <input type="checkbox"/> Prunes—3 med <input type="checkbox"/> Raisins—2 T <input type="checkbox"/> Raspberries—½ c <input type="checkbox"/> Tangerines—2 sm <p>1 serving = 75–110 calories, 15 g carbs</p> <p>Eliminate</p> <p>Barley, corn, amaranth, rye, kamut, rye, spelt, triticale, wheat</p>	

© 2016 The Institute for Functional Medicine

VEGETABLES Non-starchy	VEGETABLES Starchy
<p>Servings/day _____</p> <ul style="list-style-type: none"> <input type="checkbox"/> Artichoke <input type="checkbox"/> Asparagus <input type="checkbox"/> Bamboo shoots <input type="checkbox"/> Beets (subd) <input type="checkbox"/> Bok choy <input type="checkbox"/> Broccoli <input type="checkbox"/> Brussels sprouts <input type="checkbox"/> Cabbage <input type="checkbox"/> Carrots <input type="checkbox"/> Cauliflower <input type="checkbox"/> Celery <input type="checkbox"/> Chard/Swiss chard <input type="checkbox"/> Chervil <input type="checkbox"/> Clavies <input type="checkbox"/> Cilantro <input type="checkbox"/> Cucumbers <input type="checkbox"/> Dill <input type="checkbox"/> Eggplant <input type="checkbox"/> Endive <input type="checkbox"/> Fennel <input type="checkbox"/> Fermented vegetables ●▲ <input type="checkbox"/> Garlic <input type="checkbox"/> Green beans <input type="checkbox"/> Greens: Beet, collard, dandelion, kale, mustard, turnip, etc. 	<p>Servings/day _____</p> <ul style="list-style-type: none"> <input type="checkbox"/> Horseradish <input type="checkbox"/> Jicama <input type="checkbox"/> Kohlrabi <input type="checkbox"/> Leeks <input type="checkbox"/> Lettuce, all <input type="checkbox"/> Macrotrends <input type="checkbox"/> Mushrooms ● <input type="checkbox"/> Okra <input type="checkbox"/> Onions <input type="checkbox"/> Parsley <input type="checkbox"/> Peppers, all ● <input type="checkbox"/> Radishes <input type="checkbox"/> Radishes <input type="checkbox"/> Sals ●● <input type="checkbox"/> Sea vegetables <input type="checkbox"/> Scallops <input type="checkbox"/> Shallots <input type="checkbox"/> Snap peas/snow peas <input type="checkbox"/> Spinach ● <input type="checkbox"/> Sprouts, all <input type="checkbox"/> Squash: Delicata, pumpkin, spaghetti, yellow, zucchini, etc. <input type="checkbox"/> Tomatoes ●●-½ c <input type="checkbox"/> Turnips <input type="checkbox"/> Water chestnuts <input type="checkbox"/> Watercress

© 2016 The Institute for Functional Medicine

In order to achieve the therapeutic effects of the Elimination Diet, it is important to know which foods to avoid and which foods are okay to eat. The table below provides a summary.

Table of foods to remove/foods to eat:

Foods to Avoid	Foods to Eat
<ul style="list-style-type: none"> ■ Alcohol ■ Beef ■ Chocolate ■ Coffee, soft drinks, tea ■ Corn ■ Dairy products ■ Eggs ■ Gluten-containing grains (all varieties of barley, rye, spelt, wheat) ■ Peanuts ■ Pork ■ Processed meats ■ Shellfish ■ Soy and soy products ■ Sugar (white sugar, high-fructose corn syrup, brown sugar, sucrose, etc.) 	<ul style="list-style-type: none"> ■ Dairy alternatives ■ Fish ■ Fruits (only those specifically listed) ■ Game meats ■ Gluten-free whole grains (amaranth, buckwheat, millet, quinoa, rice, teff, etc.) ■ Healthy oils ■ Legumes (except soy, peanuts) ■ Nuts (except peanuts) ■ Poultry ■ Seeds ■ Vegetables



Protein

Protein is an essential cornerstone of optimal nutrition. It performs multiple functions in the body, such as helping to stabilize blood sugar levels, which in turn keeps hunger and cravings at bay. Additionally, the human body cannot effectively eliminate toxins without amino acids—the building blocks of protein—that bind transformed toxins in the liver and help the body excrete them. Thus, it is extremely important to include some protein in every meal or snack.



The Elimination Diet offers different sources of animal and plant proteins from which to choose. As with the other food categories, quality is of utmost importance. High-quality proteins include lean, pasture-raised, grass-fed, organic, and non-genetically modified (GMO) sources. Options include low-mercury fish like halibut, herring, mackerel, salmon, sardines, and tuna. Wild-caught, sustainable fish choices are preferred, as some farmed fish may contain hormones and harmful chemicals. Other protein options include wild game (buffalo, elk, lamb, venison) and poultry (chicken, Cornish hen, turkey).

Vegetarian protein choices include spirulina, legumes, lentils, peas, and select protein powders (hemp, pea, and rice).

Legumes

Legumes are a perfect source of quality protein and complex carbohydrates, which give a sense of fullness and stabilize blood sugar. At least one serving of legumes on a daily basis in soup or as cooked beans, dips, or hummus is recommended.



Dairy Alternatives

Dairy products are not included in the Elimination Diet, as dairy is often a culprit in gastrointestinal symptoms. Additionally, the risk of toxin and hormone contamination is high with many commercially available dairy products. There are several dairy alternatives available in this food plan, mostly in the form of milks made from nuts. Dairy substitutes like coconut (boxed variety), almond, flaxseed, or hazelnut milk often contain added sweeteners or gums, so it is important to read food labels before purchasing. Unsweetened coconut kefir is included in the food plan because of its prebiotic and probiotic potential, which may help improve gut health and aid in toxin removal.



Nuts & Seeds

A variety of nuts and seeds is included in the Elimination Diet. They can be added to meals for a nutrient and flavor boost—perhaps sprinkled on top of salads or vegetable dishes—and make a great snack choice. Eating a handful of nuts each day has been shown to reduce the risk of chronic disease. It is recommended that at least 1 to 2 servings of nuts be eaten every day. Raw, unsalted nuts instead of nuts roasted in oil are preferred. Flaxseeds and hemp seeds can be ground and stirred into smoothies or sprinkled on salads. Additionally, nut butters like almond butter, cashew butter, and tahini (sesame seed butter) can be used as condiments, spread on fruit, or drizzled over vegetables.

Nuts can often be the source of food allergies, so a Functional Medicine practitioner may recommend a personalized variation of this food plan that excludes nuts if allergies or sensitivities are known or suspected.

Fats & Oils

A large selection of fats and oils can be used for salad dressings and cooking while following the Elimination Diet. Approved choices are minimally refined, cold-pressed, organic, non-GMO fats and liquid oils, as these will be the best quality. Consuming these high-quality fats on a daily basis is recommended for reducing inflammation, stabilizing blood sugar levels, and minimizing sugar cravings. A Functional Medicine practitioner may prescribe specific amounts to meet an individual's nutritional needs.



Extra-virgin olive oil is associated with healthy cholesterol levels. Research suggests that consuming minimally processed extra-virgin olive oil provides the greatest health benefits by increasing HDL (healthy cholesterol) and decreasing oxidative damage. The health benefits of olive oil are also found in whole olives, which are included in this category.

Coconut-based fats, particularly coconut oil, are rich in medium-chain fatty acids (MCFAs) that help restore gut health. MCFAs are absorbed directly into the lining of the small intestine and sent straight to the liver for energy production, or are converted into ketone bodies, an important source of energy for the brain. In addition, these fats have antioxidant and antimicrobial properties that help support the immune system. They also offer antifungal, antibacterial, and antiviral benefits. Because MCFAs are extremely easy for the body to burn for calories, there is less potential for them to be stored as fat. Canned coconut milk is included in the 'fats and oils' category because it is predominantly a source of fat, unlike boxed coconut milk, which is primarily a source of protein and carbohydrates. However, most metal cans are lined with a toxic material, bisphenol A (BPA), so look for BPA-free cans when buying canned coconut milk, or purchase the boxed version instead.



Another high-quality fat included in the Elimination Diet is avocado oil. Unlike many other plant-based oils that are pressed from the plants' seeds, avocado oil is pressed from the fruit itself. In addition to being good sources of high-quality, healthy fat, avocados and their oils are nutrient-dense and antioxidant-rich. One half of an average avocado contains more potassium than a banana, in addition to other important nutrients like magnesium, folate, choline, and glutathione.



Touring Through the Food Plan

Ghee, or clarified butter, is also included in this category. While ghee is technically a dairy product, all milk proteins are removed in the process of making it. Ghee is primarily composed of short-chain fatty acids (SCFAs), which are easily digested by the body and are thought to stimulate the secretion of stomach acids to help with digestion. Ghee also has a high concentration of butyric acid, which contains antiviral properties and helps break down food for energy. The butter used for making ghee should come from grass-fed cows and be certified as organic.



Sesame oil is included in the Elimination Diet for its medicinal role in liver function, as it assists in the healthy processing of fats and reduces inflammation. Other fats included in this category include almond oil, flaxseed oil, hempseed oil, and walnut oil.

Fats and liquid oils can be damaged by heat, light, and oxygen. Liquid oils should be stored in tightly-sealed, tinted glass (not plastic) containers and kept in a cool, dark area. They should not be kept near the stove and should be discarded if they smell rancid.

Non-Starchy and Starchy Vegetables

The Elimination Diet emphasizes eating plenty of vegetables. Ideally, it is best to get 10–12 servings of vegetables per day. (A serving is ½ cup of most vegetables or 1 cup of raw leafy greens.)

Green vegetables, especially members of the cabbage family, are particularly nutritious for those on the Elimination Diet. However it is important to eat a “rainbow of colors” in addition to greens; such foods include red beets, red peppers, and radishes; orange carrots, orange pepper, yams, sweet potatoes, and winter squash; yellow summer squash and yellow peppers; and white onions and garlic. To promote good health, it is important to eat a variety of colors each day. While darker-colored plants are generally higher in phytonutrients, even vegetables from the white family have potent contributions to make.



Fruits

Phytonutrient-rich fruits offer antioxidant protection, which helps reduce inflammation. Eating a piece of fruit may be helpful when the desire for something sweet arises. It's always better to eat fruit with a little bit of protein, such as nuts or nut butter, to offset any blood sugar spikes. Fruit can be fresh or frozen, but must contain no added sugars or sweeteners.

The Elimination Diet includes fruits that offer a wide range of health benefits, including blackberries, blueberries, kiwi, pomegranate seeds, and raspberries. Pomegranate seeds are recommended because they support detoxification pathways. In addition to improving memory and cognition, blueberries contain one of the highest antioxidant levels of all fruits. Apples contain phytonutrients that suppress inflammation. They may be eaten raw



Touring Through the Food Plan

or stewed with cinnamon for added benefits. Small amounts of dried fruit are acceptable on occasion; you can make your own dehydrated, non-sweetened fruit to eat. As with vegetables, it is important to purchase organic fruit whenever possible.

While citrus fruits are included in the Elimination Diet, a Functional Medicine practitioner may direct patients to exclude such fruits in cases of a known or suspected sensitivity.

Gluten-Free Grains

Gluten and gluten-containing grain products (breads, cereals, crackers, pastas, etc.) are omitted from the Elimination Diet. Removing the gluten-containing grains is just the first step, however, as gluten is also commonly found in prepared sauces, dressings, seasonings, and many other foods.

Gluten-free whole grains, those with an intact bran outer coat, are allowed on the Elimination Diet as they provide an excellent source of fiber and other phytonutrients to assist with detoxification. These grains include amaranth, buckwheat, kasha, millet, oats, quinoa, rice, and teff. Cross-contamination is an issue with oats and perhaps other gluten-free grains when those grains are grown near wheat, rye, or barley. It is also an issue when gluten-free and gluten-containing grains are processed using the same machinery. When purchasing oats, look for the certified gluten-free seal on the package. Patients with celiac disease need to ensure that gluten has been entirely omitted from daily eating. Functional Medicine practitioners may advise certain patients to limit the amount of carbohydrates from this grain category.

Beverages

Hydration helps rid the body of toxins, builds resilience to stress, enhances metabolism, and promotes satiety. It is important to drink plenty of clean, filtered water throughout the day. Individual recommendations for fluid intake will depend upon a number of factors.

To determine an individual's baseline hydration needs, divide the body weight in pounds in half. The resulting figure is the number of ounces of water to consume each day. For example, an individual who weighs 128 pounds should consume at least 64 ounces (eight 8-ounce cups) of water each day ($128 \div 2 = 64$).

In addition to filtered water, broths (vegetable, bone), meat stocks, and other decaffeinated beverages like fresh, raw, cold-pressed vegetable juices are also good liquid choices. Decaffeinated teas are also recommended on the Elimination Diet.

Omitted from the Elimination Diet are coffee, alcohol, soft drinks, and non-dairy creamer.

Coffee, while not high on the list of potential allergens, can have a significant effect on blood sugar and stress hormones. Eliminating coffee might lead to having headaches for a few days. One strategy to try is to slowly lower caffeine intake over several days to minimize the headaches, fatigue, or other unpleasant withdrawal symptoms that are often associated with caffeine withdrawal.



Touring Through the Food Plan

Alcohol is avoided because of its inflammatory effects and its interference with liver function. The liver breaks down most of the alcohol a person consumes, but the process of breaking down alcohol creates toxins that promote inflammation and weaken the immune system.

Both artificially sweetened and regular soft drinks should be eliminated for the duration of the Elimination Diet. Try substituting seltzer water with lemon or lime wedges, or a splash of coconut water.

It is important to avoid non-dairy creamer, as it contains refined sugars and unhealthy hydrogenated fats. Instead, use one of the non-dairy milk substitutes like almond or coconut milk in place of milk and creamer.

Spices and Condiments

All herbs and spices are included in the Elimination Diet. Some of these can reduce pain and inflammation, particularly in cases of gastrointestinal upset: cayenne pepper, chili powder, cilantro, ginger, nutmeg, and paprika. Turmeric is also known for its anti-inflammatory and pain-relieving properties. Digestive health is further enhanced by several others, including cinnamon, cumin, and dill. Other herbs and spices selected for detoxification and for their overall antioxidant and antimicrobial effects include cloves, oregano, rosemary, and thyme.



Most condiments available on store shelves are not permitted on the Elimination Diet, as they can contain added sweeteners and preservatives. However, homemade versions of many condiments—including ketchup and barbecue sauce—can be easily made using few approved ingredients.

Store-bought mustards (Dijon, stone-ground, etc.) made without added sugars are permitted, as are vinegars (raw apple cider vinegar, balsamic vinegar, and white vinegar). Note that condiments should be used sparingly.

A Note about Sweeteners

Certain sweeteners, in very small amounts, are acceptable on the Elimination Diet: brown rice syrup, blackstrap molasses, pure maple syrup, raw honey, coconut sugar, agave nectar, lo han, erythritol, and stevia. Use no more than three teaspoons daily of all sweeteners combined. Note that stevia is a high-intensity sweetener that requires no more than a pinch for maximum sweetness.



- **What Not to Use:** Table sugar and other highly processed sweeteners such as brown sugar lead to inflammation because they cause a dramatic surge in blood sugar, so are not advised on this program. Artificial sweeteners are not acceptable under any circumstances. Many sweeteners, like high fructose corn syrup (HFCS) and corn syrup, are derived from corn, which is eliminated on this program. Overall, high-intensity sweeteners perpetuate a need for sweet-tasting food and make it difficult to enjoy the natural sweetness of fruits and certain vegetables.

A Note about Chocolate

While cocoa has redeeming qualities in an otherwise healthy diet, all cocoa-related products like hot cocoa and chocolate are typically not allowed on the Elimination Diet because of their caffeine content. The Functional Medicine practitioner will determine whether cocoa is appropriate for individual patients following this eating plan.

Touring Through the Food Plan

Food Substitutions

The following is a list of substitutions for foods that are avoided while on the Elimination Diet.

When you want this...	...eat this
Milk (for cereal or shakes), yogurt, cheese	Milk substitutes: unsweetened rice, oat, hemp, almond, sunflower, hazelnut, and coconut milk; unsweetened coconut yogurt or kefir; read labels to ensure substitute is lactose/casein-free
Hot cereal, such as Wheatena or other hot cereal	Oatmeal or steel-cut oats, rice cereal, quinoa flakes, or Apple Cinnamon Amaranth Porridge*
Cold cereal	Puffed rice and millet, crispy brown rice, amaranth cereals; all labeled gluten-free (note that there tends to be corn in foods labeled gluten-free)
Bread, crackers, & pasta	Gluten-free breads, crackers, or pasta made with brown rice, oats, teff, millet, quinoa, amaranth, tapioca, buckwheat, sorghum, potato flour, and garbanzo bean flour; cellophane noodles from bean threads; check labels for gluten-free with acceptable sweeteners
Quick breads	Chia Seed Applesauce Bread*, Pumpkin Oatmeal Pancakes*
Breading	Grind any allowable rice crackers or bread, or use almond meal (any nut meal), ground chia seeds, coconut, or coconut flour
Eggs	Store-bought egg-replacer, or blend 1 Tbsp. flax meal or chia seeds in blender with ¼ cup water and allow to thicken for a few minutes
Peanut butter	Nut butters made from almonds, cashews, macadamias, walnuts, hazelnuts or pumpkin and sesame seeds (tahini)
Ice cream	Various brands of rice or coconut-based frozen desserts; read labels carefully for approved sweeteners
Soft drinks	Sparkling or mineral water, mixed with a squeeze of lemon or lime, or with a small amount of your favorite juice (¾ water, ¼ juice); filtered or purified water with slices of lemon or lime; unsweetened coconut water
Coffee/tea	Herbal teas
Butter or margarine	Coconut oil or ghee (clarified butter)
Sugar & sweeteners	Unsweetened apple butter, brown rice syrup, blackstrap molasses, pure maple syrup, raw honey, coconut sugar, agave nectar, lo han, erythritol, and stevia.

**Refers to a recipe to be provided in another handout*



It's Worth the Effort!

Some dietary changes present greater challenges than others. Keep in mind that feeling healthy is worth the effort. Focus on the end result. The first few days are the hardest, particularly when having symptoms of withdrawal from foods that had been eaten several times daily (breads, desserts, milk products, processed and sweetened fast foods, pasta, etc.). Be sure to shop ahead (using the shopping guide included in the recipe handout) and prepare some quick meals or snacks ahead of time. This dietary program may initially require more time and energy than typically spent preparing foods for each meal. It is worth your time—and remember that it is temporary. However, most people feel so good after being on the diet that they want to continue eating this way!

How Long Will It Last?

The Functional Medicine practitioner determines the duration of the Elimination Diet for every patient. Typically, the Elimination Diet is followed for three weeks. Shorter time periods may not yield the same results, as the body needs time to clear its reactivity to foods that are triggering symptoms. Initially, symptoms may worsen for a short time (rarely more than a few days) due to withdrawal from the foods commonly eaten. Transient reactions may be experienced in the first four to seven days as the body adjusts to the intake of different foods. These reactions can include changes in sleep patterns, fatigue, lightheadedness, headaches, joint or muscle stiffness, and gastrointestinal complaints. Such symptoms rarely last for more than a few days and will vary depending on the person's body and lifestyle factors.

What Foods Can Be Eaten?

It is necessary to eat **ONLY** the foods that are on the food list. If a food is not on the list, do not eat it. By the end of the prescribed period of the Elimination Diet, most people note improvements in many symptoms. They report increased energy and mental alertness, fewer headaches, less muscle or joint pain, fewer and milder GI symptoms, and a general sense of improved well-being.

What About Snacking and Eating Out?

It is typical to snack on whatever is available at work or at home. When following the Elimination Diet, have only acceptable foods around in the event of hunger. Keep snacks and salad dressings at work for a quick snack or lunch salad. Eating out is generally not recommended as you will not be aware of all that is in the food served. Traveling is also best avoided during this time, for the same reasons. It can be quite challenging to eat while on the road or in an airport. If you do travel or visit with friends or family, it is helpful to have the right food available to eat. Bring along nuts, fruits, and vegetables that will travel well.

Helpful Hints

- **Plan from the start:** Before starting the Elimination Diet, it is important to have everything required in the home as planning ahead and strategizing will greatly improve your chances of successful results. Make sure each food you buy is on the food list.
- **Don't go hungry!** Be sure to eat enough food to avoid hunger.
- **Read all ingredient labels:** Check the “Hidden Foods” list for various foods and ingredients to avoid.
- **Eat enough food:** Add extra vegetables and fruits as needed. The menu is a basic one and needs a personal touch. This is not a calorie-restricted plan. Be sure to eat enough calories for energy as well as adequate nutrient intake.
- **Eat regular meals:** Eating consistently throughout the day will help keep blood sugar stable. Eat suggested snacks as needed for hunger or cravings.
- **Choose organic:** Whenever possible, select fresh foods and organically-grown fruits and vegetables to reduce the intake of pesticides and chemical residues. Wash fruits and vegetables thoroughly.
- **Choose cold-pressed oils:** Cold-pressed oils are not heated in processing and tend to be healthier than oils that have been heated, as heat breaks down the oil. Organic oils are always preferred when possible. It is difficult to find organic canola oil, so one may need to find an alternative.
- **Eliminate caffeine:** Caffeine-containing beverages are not on this diet. If consuming these drinks on a regular basis, reduce caffeine intake slowly prior to beginning the Elimination Diet to prevent or reduce withdrawal symptoms. Try drinking half decaf/half regular coffee for a few days, and then slowly reduce intake of all caffeine. It is a good idea to first transition to decaffeinated coffee first before eliminating all coffee or tea.
- **Drink enough water:** Remember to drink adequate amounts of plain, filtered water each day: six to eight 8-ounce glasses daily should be your goal. Add freshly squeezed lemon or lime juice for extra flavor.
- **Get rest:** A Functional Medicine practitioner may recommend limiting strenuous or prolonged exercise for part of this program or, in some cases, for the entire program, to allow the body to heal more effectively without the additional burden of exercise. Adequate rest and stress reduction is also important to the success of this program. A light, daily walk may be the perfect exercise during this time.



The Role of Anti-Inflammatory Foods in the Elimination Diet

Inflammation is present if there is pain, redness, and swelling in the body. Inflammation taxes the immune system. It is best to eliminate inflammation as much as possible. Inflammation is associated with many chronic diseases. All adverse food reactions create inflammation in the body. For example, inflammation in the gut can result in diarrhea or constipation. Inflammation in the joints can lead to arthritis-type symptoms.

The following section on what to include or exclude will help patients ensure that anti-inflammatory foods are the focus in the diet.

Anti-inflammatory Foods to Include:

In general, fresh fruits and vegetables and foods that provide omega-3 fats are the best way to provide anti-inflammatory support to your body. The typical American diet contains a higher percentage of omega-6 fats, which can be pro-inflammatory when they are out of balance with omega-3 fats.

Include these foods:

- 1. Fatty fish**, such as wild-caught salmon, mackerel, cod, tuna, and sardines, provide a balance of essential fatty acids high in anti-inflammatory omega-3 fats.
- 2. Grass-fed lamb or buffalo meats** contain significant amounts of omega-3 fats that meat from grain-fed animals is lacking.
- 3. Nuts and seeds**, especially almonds, walnuts, and flax seeds, contain omega-3 fats and healthy fiber.
- 4. Dark leafy greens**, such as kale, broccoli, collards, cabbage, and other cruciferous vegetables are high in fiber and may protect the body from pro-inflammatory molecules called cytokines. They are also high in phytonutrients called glucosinolates that assist detoxification.
- 5. Red and blue colored fruits and vegetables** such as red cabbage and onion, red bell pepper, all berries, red grapes, cherries, and plums contain anti-inflammatory phytonutrients.
- 6. Extra-virgin olive oil and olives** contain anti-inflammatory phytonutrients called polyphenols.
- 7. Moist heat cooking using low temperatures**, such as crock-pot cooking, creates fewer inflammatory by-products.
- 8. Certain spices**, such as turmeric, ginger, oregano, garlic, rosemary, cayenne, cloves, and cinnamon, have anti-inflammatory properties. Use them in combination with food, especially when using high-heat cooking methods.



Inflammatory Foods to Exclude:

Focusing on anti-inflammatory foods in the diet is just the first step. What is not eaten is as important as what is eaten.

During the Elimination Diet, and even afterwards, reduce or eliminate the following:

- 1. Trans-fats:** Found in processed foods like cakes, cookies, bagels, and crackers.
- 2. Refined sugars:** Added refined sugars are pervasive in processed foods. Read the labels very carefully for sugars such as HFCS, corn sugar, corn syrup, and sucrose.
- 3. Foods with a high glycemic response:** High-glycemic foods create blood sugar spikes after eating; these can stress the body to overproduce insulin, which is not healthy. Over time, the body becomes less equipped to handle high-sugar foods, and inflammation increases from the excess sugar and insulin produced. Examples of foods with a high-glycemic response are refined grains and breads, desserts, sweetened beverages, and highly processed prepared foods. Rice and bananas, both of which are on the Elimination Diet, are moderately high in glycemic impact, so eat protein at the same time to offset any blood sugar spikes.
- 4. High omega-6 oils such as corn or soy:** Most people eat high amounts of refined vegetable oils in their diet if they eat lots of processed foods. These oils have high amounts of omega-6 fats and too little omega-3 fats. When the omega-6 fat level in the diet is too high compared with the omega-3 level, enzymes involved in inflammation can be activated. The goal is to balance those two types of fats.
- 5. Gluten-containing foods (wheat, rye, barley, spelt, kamut):** More people are learning that they have gluten intolerance. While it is unknown why this is happening, one theory is that the genetic modification of these grains in the modern era of agriculture has led to changes in how most people digest them in the gut. For some people, wheat may be more of an issue; for others, all of these grains could provoke inflammatory-related symptoms. Another theory about the recent surge of gluten intolerance is that the reaction isn't caused by the grains themselves, but rather by the pesticides and herbicides the grains are treated with. Yet another theory is that treating grains with enzymes or acid to make flour that is more easily mixed with liquids (a process called deamidation), may be affecting the body's ability to handle them.
- 6. Saturated animal fats from grain-fed red meats:** Dietary fat has had a bad reputation for a long time. However, there are many types of fats and they are not all inflammatory; too much poor quality fat is the real problem. New research suggests that a high-fat meal of animal foods could lead to inflammation in the body. Adding vegetables to the meal can help to offset the inflammation. This finding does not mean that one should not eat animal foods, but that if they are eaten, vegetables should be included with the meal.



7. Dairy-containing foods: Foods that contain dairy products such as milk, yogurt, cheeses, and butter, when eaten in large amounts, may be inflammatory in certain individuals. This effect may be due to the milk itself or to the contaminants in the milk, such as growth hormone and antibiotics that were given to the cow.

8. High-temperature cooking with fats: The process of cooking can lead to the formation of inflammatory compounds in foods. Foods that take on a brown color with cooking have high levels of these compounds (e.g., fried potatoes; fried, broiled, grilled, and roasted meats, especially bacon, and fish; pastries or pizza crust). Both during and after the Elimination Diet use slow-cook methods, as well as poaching and steaming, instead of grilling, broiling, and frying.



Guidelines for Reintroducing Foods

How to Get Started

To help identify potential problem foods once the Elimination Diet has been completed, foods that seemed associated with symptoms (“challenge foods”) should be reintroduced into the diet, one at a time in two-day intervals.

1. On the first day of the reintroduction phase, choose whatever food is missed the most or craved the most, or was eaten most often. The order of reintroduction of foods is not critical.
2. Eat a generous amount of that food throughout Day 1 (two or three average-size portions), while continuing to eat foods on the Elimination Diet. During that day and the next (Day 2), record any symptoms on the Food Reintroduction – Symptoms Tracker chart (available from your Functional Medicine practitioner).
3. If there is no reaction to the food during this two-day period, keep that food in the food plan and reintroduce a second food on Day 3. Watch for any symptoms on Day 3 and Day 4. If there is no reaction, keep that food in the diet and add the third challenge food, and so on.

If any food provokes symptoms, stop eating that food immediately, wait till the symptoms clear, and reintroduce the next food. After testing all of the challenge foods, try the problem food again using the same procedure (one day of eating the food and noting symptoms during the following two-day period).

Foods to Be Reintroduced

On the Elimination Diet, patients avoid wheat, dairy, soy, corn, peanuts, eggs, beef, pork, and shellfish. A Functional Medicine practitioner may add some other items to the list of foods to avoid. Patients can pick the order in which to try reintroducing these foods. For example, some people eliminate wheat throughout the food challenge period and only add it back at the very end.

After testing the above foods, begin to challenge the remaining foods that were avoided during the Elimination Diet such as barley, rye, coffee/tea (regular or decaf), alcohol, and chocolate.

For each food, identify and eat a pure form containing no additives or ingredients that have been eliminated, such as sugar or preservatives. The following are examples of pure foods from each of these food categories.

Guidelines for Reintroducing Foods

Types and Amounts of Foods to Re-Introduce

Food/Group	Challenge Food (Examples)	Average Portion Size
Wheat/gluten	100% whole wheat cereal (e.g., Wheatena) 100% whole wheat noodles	½ cup 1 cup
Dairy	Milk (skim, 1%, 2%, or whole milk) Cheese (any whole milk cheese, no additives)	1 cup 1 ounce
Corn	Fresh or frozen corn kernels	½ cup or 1 small cob
Pork	Cooked meat, not in a casserole	3-6 ounces
Egg	Hard or soft boiled or poached	2 eggs
Peanuts	Raw or dry roasted peanuts Peanut butter made of 100% peanuts only	¼ cup nuts 2 T peanut butter
Soy	Edamame Soy milk Tofu, tempeh	½ cup 1 cup ½ cup
Shellfish	Challenge individual shellfish each time*	3-6 ounces
Barley, rye	Cooked barley or rye cereal 100% rye crackers	½ cup 2-3 crackers

**It is not uncommon to react to only one type of shellfish, such as shrimp, but not others, so it is wise to challenge each separately.*

Pitfalls of Challenging Foods

When reintroducing coffee or caffeinated beverages, chocolate, food additives, or alcohol, make sure to eat just that food alone. This can be tricky, as they often are mixed with other foods you've been avoiding.

Examples:

1. Chocolate candy also contains sugars, so beware of any reaction to a candy bar, as it will not be clear if there is a reaction to the chocolate or the sugar, or perhaps other additives.
2. Do not challenge with a mocha drink that contains coffee AND chocolate, or a coffee drink that contains some alcohol. Other types of food used for challenging that may cause confusion include pizza or lasagna, which contain both dairy and wheat/gluten. It is also not unusual to react to wheat but not other gluten-containing grains (rye and barley).

The Takeaway: Reintroduce pure, uncomplicated foods rather than complex foods.

Guidelines for Reintroducing Foods

Reactions to Challenge Foods

Stop eating any foods that produce a clear negative reaction.

Potential reactions include diarrhea or constipation, fatigue, depression, anxiety, gas, bloating, abdominal pain, headache, muscle or joint pain, skin irritations or break outs, insomnia, sinus congestion or runny nose, itching, or flushing.

Track symptoms on the Food Reintroduction Symptoms Tracker. This chart and instructions for how to use it will be provided by the Functional Medicine practitioner.

IMPORTANT: When there are symptoms after challenging a food, it is advisable to stop eating that food immediately and allow symptoms to completely clear before introducing the next food. The "problem" food can be tested again after testing the rest of the challenge foods.

Removing Foods Associated with Symptoms

Remove from the diet foods that provoke symptoms for another 3 three to six months. During this time, the healthcare practitioner may recommend medical foods or dietary supplements to help support the body in healing.

After completing the initial testing of all the foods that were removed during the Elimination Diet, it may also be useful to test individual foods within a single food group to see if there is sensitivity to certain forms of the food.

For example, within the dairy group, test cheese made from cow's milk, sheep's milk, and goat's milk. Yogurt and butter may often be tolerated when milk is not. In the wheat group, test sprouted wheat products, spelt, emmer (farro), einkorn, and other ancient forms of wheat or sourdough wheat.

Use the same process used in challenging foods during the initial reintroduction: introduce only one food at a time for one day, followed by a 24-hour observation period. If no reactions occur, proceed to the next food in that group. If symptoms occur, wait until all symptoms clear, then test the next food in that group.

Consult with a healthcare practitioner if there are questions when reintroducing foods.



What is the difference between a food allergy, food intolerance, and a food sensitivity?

Some reactions are considered to be food allergies, which cause severe symptoms immediately after a trigger food is eaten. A food that produces an allergic response will result in the immune system identifying it as foreign. It will attack the food's proteins, causing allergic symptoms (swelling, itching, breathing difficulties, etc.). Some reactions may be delayed by hours or even days; this type of adverse food reaction is referred to as a food sensitivity. Food sensitivities are usually the result of an imbalance in the gastrointestinal system that affects the immune system. Often, food sensitivities cause hidden symptoms that are difficult to interpret. Food intolerances are reactions to certain food chemicals (e.g., lactose, MSG, histamines, etc.) that occur when a person is lacking an enzyme or nutrient needed to break down that chemical. This results in an inability to properly metabolize certain foods.

While some people call an adverse food reaction a “hidden food allergy,” many of these reactions are actually an intolerance or sensitivity. Besides lactose intolerance, other important intolerances to consider when looking at chronic symptoms include intolerance to histamine, salicylate, fructose, and gluten. In general, food intolerance refers to responses to food or naturally-occurring compounds in foods that are not allergy-induced; they may stem from a variety of causes, including an inability to digest and assimilate nutrients.

A Functional Medicine practitioner will assist the patient in determining whether a food allergy or food intolerance is present.

Isn't a blood test to determine food allergies, intolerances, or sensitivities more accurate than following the Elimination Diet?

Blood tests to identify food reactions have not proved as dependable and accurate in identifying problem foods as an elimination diet and subsequent reintroduction of problem foods. Patients may want to see “proof” by doing a blood test, but the results of blood testing often do not tell the full story. For example, food intolerances may not show up on blood tests as there may be no actual immune response involved in the body's reaction.

What if the Elimination Diet doesn't resolve symptoms?

When the Elimination Diet does not bring resolution to symptoms, it may be necessary to investigate further with a Functional Medicine practitioner. It is essential to assess whether the person consistently followed the Elimination Diet and whether the food challenges were carried out correctly. To achieve good results, it is necessary to follow the diet 100% of the time. It's better to spend the time to do it right the first time rather than have to repeat the program.

If the diet was followed properly, the healthcare practitioner may decide to put the patient on another protocol to address other issues, perhaps a food plan geared specifically to eliminate certain sugars, or maybe a plan to remove foods that contain one or more of the following: histamines, nightshades, salicylates, or oxalates.

Are there any other foods I should avoid?

In addition to the major allergens contained in the foods omitted from the Elimination Diet, there are compounds in certain vegetables and fruits that may cause food intolerances in certain individuals. These compounds include histamines, oxalates, salicylates, and nightshades. Practitioners may choose to have their patients avoid foods that contain these compounds if there is reason to think that these foods are causing symptoms. Nightshades and foods high in histamine are highlighted on the food list to help individuals for whom these foods are a concern. If symptoms are observed when eating foods from these categories, patients should notify their practitioner.

Histamines

Histamine can be a key mediator in inflammation in certain individuals. It occurs naturally in many foods and is also produced by the body during times of stress and allergy. Histamine is made and stored in mast cells and is released during allergen exposure, causing dilation of blood vessels, increased mucus production, and broncho-constriction (tightening of the lungs). The release of histamine results in symptoms such as itching, sneezing, asthma, headache, and rash. Certain foods and food additives prompt the release of histamine from mast cells.



In general, foods to avoid on a low-histamine diet include bananas, chocolate, strawberries, tomatoes, egg whites, pork, sauerkraut, cheeses, fermented soy products, sausage, spinach, ketchup, eggplant, alcoholic beverages, smoked meats, vinegars, and canned fish, coffee and tea, leftover meats along with certain food additives and preservatives such as tartrazine and other food colors, benzoates, BHA, and BHT. You will note that some of these foods are on the approved food list for the Elimination Diet.

The histamine content in foods varies markedly according to storage and maturation; protein foods that may normally be low in histamine will have increasing amounts of histamine as they age (e.g., leftover beef) or ripen (a green tomato vs. a ripe tomato). Leftover foods, especially those containing protein, should be frozen immediately. It is generally advisable to eat only food that has been freshly prepared.

Oxalates

Oxalates are naturally occurring molecules found in plants and in the human body. Because the body cannot process oxalates, they are usually eliminated through the stool and urine.

However, certain health conditions (like a predisposition to kidney stones) may mean that oxalates should be limited or avoided. The leaves of oxalate-containing plants typically contain higher oxalate levels than the roots, stems, and stalks. Foods high in oxalates include blackberries, blueberries, raspberries, strawberries, currants, kiwifruit, Concord (purple) grapes, figs, tangerines, plums, spinach, Swiss chard, beet greens, collards, okra, parsley, leeks, quinoa, celery, green beans, rutabagas, summer squash, almonds, cashews, peanuts, soybeans, tofu, soy products, wheat bran, wheat germ, cocoa, chocolate, and black tea.



Salicylates

Salicylates are derivatives of salicylic acid that occur naturally in plants and serve as a natural immune hormone and preservative. Salicylates can cause health problems in anyone when consumed in large doses and must be avoided by those who are salicylate-intolerant. The bark, leaves, roots, and seeds of certain plants store salicylates, preventing them from rotting and protecting them against harmful insects, bacteria, and fungi. Many common foods, such as citrus fruits, berries, certain vegetables, herbs, spices, tea, and flavor additives, contain salicylates. Chemically related to aspirin, salicylates may also be created synthetically and can be found in many drugs other than aspirin: analgesics, muscle relaxants, cough mixtures, antacids, cold and flu medications, and acne lotions. Certain perfumes, pesticides, and preservatives also contain salicylates.

People with nasal polyps and asthma may have a particular susceptibility to salicylate-containing foods.



Frequently Asked Questions

Nightshades

Nightshades are a botanical family of plants known as Solanaceae. This family has more than 2,000 plant species, most of which are inedible or poisonous. The edible plants can cause adverse food reactions in individuals with certain autoimmune diseases and are especially troublesome for people who are sensitive to lectin, saponin, or capsaicin. Common edible nightshades include the following and their varieties: ashwagandha, bell peppers, cape gooseberries, eggplant, garden huckleberries, goji berries, hot peppers (e.g., chili, jalapeno, habanero, and scotch bonnet, as well as chili-based spices like cayenne, chili powder, crushed red pepper, and paprika), naranjillas, pepinos, pimentos, potatoes (except sweet potatoes), tomatillos, and tomatoes.



What do I eat in place of bread?

Rice cakes and tortillas made from rice or hemp can be an acceptable substitute for a sandwich. It might also be a good idea to eat less grain carbohydrates during this three-week period. Use a large lettuce leaf as a substitute “wrap” for vegetables or meats.

Can salt be used on this diet?

Taste food before sprinkling salt and use it sparingly. Look for salt-free seasonings if salt restriction is the goal, and choose sea salt over refined, iodized salt. Local health food stores offer a variety of these products.

What additional spices or flavorings can be used?

All spices and herbs are encouraged as they not only enhance the natural flavors of food but contain powerful phytonutrients with antioxidant and anticancer properties. Experiment with herbs and spices—try some new ones. Fresh herbs should be added near the end of cooking, while dried herbs should be added near the start of cooking.

Which condiments should be used?

All types of vinegar are allowed (balsamic, ume plum, unflavored rice, apple cider, herb-infused) and help enhance the flavor of vegetables. The following condiments contain added sugars or other ingredients that are not used on this program, so must be avoided: chocolate, ketchup, relish, chutney, soy sauce, tamari, barbecue sauce, teriyaki, and sweet and sour pickles. Please check all labels on any prepared food if there is uncertainty about acceptability.

Legumes usually cause gas and bloating. What can be done?

Legumes are desirable because they are high in protein, fiber, vitamins, and minerals. Try to increase intake slowly over the course of one to three weeks. Soaking beans for 30 minutes up to 6 hours (or overnight) before cooking and then discarding the water may also cut down on some of the gas that many people experience. Rinsing canned legumes is helpful for removing carbohydrates that cause gas. Certain legumes may produce more of a response than others. Lentils and green peas, for instance, are easier for some people to tolerate. If there is difficulty in digesting these foods, there is the possibility of being sensitive to them. A Functional Medicine practitioner can help patients determine whether a food sensitivity is present.

Frequently Asked Questions

Can canned vegetables be used instead of fresh vegetables with this diet?

Fresh and frozen vegetables are preferable because they retain more of their vitamins and generally have less added salt. Canned legumes (chick peas, black beans, kidney beans, etc.) and tomatoes are generally acceptable, but rinse the legumes well before using. Be sure to buy only BPA-free cans.

What can be used in place of butter on vegetables and potatoes?

Ghee (clarified butter) can be used in place of regular butter. Also, extra-virgin, cold-pressed olive oil and organic virgin coconut oil have distinctive flavors that work well with vegetables.

What do I do if I am uncertain whether a food reaction has occurred?

If there is uncertainty as to whether a food reaction was experienced, it is best to challenge that food again. Be sure that there are no unusual circumstances on a challenge day. For example, if you are having any symptoms, such as a headache, it is best to delay the reintroduction of the food. Be sure that enough of the food is eaten to get a good challenge. If no reaction happens the second time, then that food is more than likely not a trigger food.

If all trigger foods are avoided for 3 months, how does one know when it is fine to eat them again?

After three months, try to challenge the foods again. If there is a reaction, try again after another three to six months. Other reactions may be “fixed” – no matter how long one avoids that food, the reactions will still occur. These are most likely to be the true food allergies.

If a food is re-challenged and found to be acceptable, how often may it be eaten?

The answer is different for everyone. Even if you have no reaction on re-challenging, it may be worthwhile to wait at least four days before trying it again. It is probably best to eat the food only a couple of times a week. If a minor reaction is experienced, wait a week between each time you eat it. This is not an exact science, so judgment and body awareness must be utilized.

There are many different types of elimination diets. How is this one from IFM different?

Yes, there are many types of elimination diets, ranging from very restrictive (eating only one food a day or just a few foods each day), to less restrictive (eliminating only one food or food group for a period of time). This Elimination Diet was developed by IFM as a useful way to begin to identify problem foods, particularly when there is no suggestion of which foods may be connected to chronic complaints. This dietary approach includes elimination of gluten and dairy foods, along with pork, beef, corn, eggs, soy, peanuts, shellfish, caffeine, alcohol, and refined sugars. Some practitioners may prefer the simpler elimination of only gluten or dairy foods if those particular foods are strongly suspected.

Examples of Typical Elimination Diets

- Traditional Elimination Diet (as described above)
- Oligo-antigenic diet: a very limited diet that eliminates many foods and allows only a small number of foods that generally cause no or few reactions
- Gluten-free diet: eliminates only gluten-containing grains
- Casein-free diet: eliminates only dairy products that contain casein



Resources and Tools for Success

Changing food habits can be a complex, difficult, and sometimes confusing process. Included in this food plan suite are recipes, snack suggestions, a shopping list, and other information to make it a “do-able” process. Look over this information carefully. If there are any questions about the diet, or any problems, please call for assistance. Most issues can be resolved quickly.

The following handouts are available from a Functional Medicine practitioner to assist with using the IFM Elimination Diet:

- Elimination Diet – Food List
- Elimination Diet – Weekly Planner and Recipes
- Food Reintroduction – Symptoms Tracker
- Hidden Foods

