



## The Functional Elimination Diet

Symptoms and conditions that have failed to respond to conventional medical therapy may resolve when following the 'Functional Medicine Elimination Diet' (also known as the Autoimmune Paleo Diet or 'AIP'). Specific foods (often those eaten frequently), may be related to a long list of health conditions, including digestive problems, headaches, sinus fullness, low energy, depression, mood swings, skin irritations, joint aches, asthma, and others. Many people suffer from these symptoms for long periods of time without realizing that there could be any connection with their diet. 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. After the initial period of eliminating foods, chronic symptoms may improve or disappear (although in some cases healing may take several months). As the burden on the immune system is decreased, the body has an opportunity to heal. During this period, it is important to make sure that the diet is still enjoyable and nutrient-dense.

After completion four-weeks of the Elimination Diet, a food reintroduction process is advised. 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 this is associated with negative symptoms. Foods that provoke symptoms (physical or mental), are avoided for an additional three to six months, at which time reintroduction may be attempted again.

Once the gut is healed, many foods that initially caused sensitivities may be reintroduced into a meal plan without problems. 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 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.

### Why the Elimination Diet?

The Elimination Diet is a useful tool for diagnosing adverse food reactions, whether true allergy, intolerance, or sensitivity.

#### Identification of Food Reactions:

**Allergies:** Some reactions are considered to be food 'allergies', (often causing severe symptoms immediately after a trigger food is eaten). These allergic reactions may be simple to recognise and are often a result of Immunoglobulin E (IgE) Antibody production. These can occur in the skin and may be identified by skin-prick or patch testing.

**Sensitivities:** Other 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 part of the immune system and are often mediated by Immunoglobulin G (IgG) antibodies. These will not cause reactions when tested in the skin as IgG antibodies are not produced there.

**Intolerances:** These can be the result of reactions to certain chemicals in food (e.g., MSG or histamine), or may occur when a person lacks an enzyme necessary to digest the food, (such as lactase which is needed to digest milk sugar). These reactions are not mediated by the immune system but are the side effect of sugars or chemicals on the body which are not being processed properly.

Patients with Inflammation in the digestive tract may be more prone to loss of enzymes leading to sugar or FODMAP intolerances – typically causing bloating or diarrhoea.

Patients with micronutrient deficiencies or genetic predisposition to poor chemical processing are much more likely to experience sensitivity to chemicals such as histamine, glutamate or sulphites.



**Inflammation Reduction:**

Food reactions of any type can trigger low-grade inflammatory reactions in the intestines, making the intestinal wall more permeable to large, undigested food particles, which may then enter the bloodstream (a condition sometimes referred to as “leaky gut”). This breakdown of the intestinal barrier can also allow other substances like bacterial endotoxins, chemicals, and yeasts to leak into the bloodstream. This stimulates the immune system and increases levels of inflammation in the bloodstream and gut wall.

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 also helps to reduce inflammation by promoting the ingestion of anti-inflammatory foods. Over time, these foods, combined with the elimination of common trigger foods, helps inflammation to subside and 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.

**Increasing Healthy Gut flora:**

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 into the digestive tract. The way the immune system responds, is partly determined by the flora that inhabit the gut. The normal flora, (also referred to as the ‘microbiome’), help to regulate the immune response.

When the gut is inflamed, the balance of beneficial versus non-beneficial microbes is disrupted. This may result in improper stimulation of the immune system, causing adverse symptoms such as increased food intolerances. Providing essential nutrients for the gut flora is a critical factor in creating a healthy microbiome and a healthy immune response. 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.

## What to Eat:

### Inflammatory Food to remove for 4 weeks

- Alcohol
- Gluten – anything that contains barley, rye or wheat
- Gluten free grains- amaranth, millet, oats, quinoa, rice
- Dairy- milk, butter, cheese (including sheep and goat), cream, ghee, ice cream, whey protein, yoghurt
- Eggs
- Maize - corn, cornflour, sweetcorn, polenta
- Nightshades - aubergine, peppers, white potatoes, tomatoes, chilli
- Nuts and nut butters (Some may be kept in for protein by Dr Sarah to maintain protein intake))
- Peanuts (these are actually legumes)
- Seeds and seed butters including tahini (Chia seeds may be permitted in some patients)
- Shellfish
- Soya - textured vegetable protein, soya milk and yoghurt, soya sauce / Tamari
- Sweetened fruit juices
- Stimulants- chocolate, coffee, yerba mate tea
- Sweeteners: sugar, alcohols, honey, agave, maple syrup, molasses coconut palm sugar

### Anti-inflammatory Foods to Enjoy for 4 weeks

- Proteins - Sprouted and soaked legumes (to reduce lectins – please see separate handout), nuts as directed by Dr Sarah, fish if you are following a Pescatarian diet (avoiding tuna).
- Organic Vegetables- Artichokes, asparagus, pak choi, broccoli, sprouts, cabbage, cauliflower, lettuce, mushrooms, olives, onions, parsnips, sea vegetables, spinach, kale (and all leafy greens), squash, sweet potatoes, turnips, courgettes – and any others not listed here.
- Healthy Fats- avocado, coconut oil, olive oil, grapeseed oil, flax oil, hemp oil, black seed oil
- Fruits- apples, apricots, bananas, blackberries, blueberries, cherries, coconut, cranberries, figs, grapefruits, grapes, kiwis, kumquats, lemons, limes, mangoes, melons, nectarines, oranges, peaches, pears, raspberries, strawberries, tangerines (organic where possible)
- Seasonings- apple cider vinegar (with mother), basil, bay leaf, black pepper, Cacao, cardamom, carob, coriander, cinnamon, clove, cumin, dandelion, dill, fennel seeds, garlic, ginger, mustard, nutmeg, oregano, parsley, rosemary, sea salt, tarragon, thyme, turmeric
- Beverages- Homemade fruit and veggies juices, teas- all varieties of herbal tea, green tea in moderation (organic where possible)
- Stevia- a plant based sweetener from Paraguay whose leaves are three hundred times sweeter than sugar

## Reintroducing and challenging foods:

For the first 30 days you really need to follow the eating plan 100 percent, because even a tiny deviation could flare your immune system again. If you have an autoimmune condition or other chronic illness, your body is by definition highly inflamed. Your number one priority is to bring that inflammation down and, because of the way your body's chemistry works, even a small amount of inflammatory food can prevent this from occurring.

For many people thirty days may be enough to right the balance and give you a little leeway; some sugar some gluten free grains maybe a little caffeine will be fine. For many others, you may need longer especially if your symptoms have been severe and you suffer from multiple conditions or you have had an auto immune condition for a few years.

Deciding when is right to start re-introducing foods depends on your underlying problems. For some with severe problems, you may wish to wait until your symptoms have started to settle for a few weeks before adding some foods back in. However, for most patients (even if symptoms are still present), four weeks is sufficient time to remove a food trigger from the body so that an elimination challenge can be effectively interpreted. Please note – you DO NOT need to be fully well to start the food challenges as most people will experience additional symptoms, despite underlying ongoing problems, if a food is challenged properly.

### Foods to Test:

Per Protocol (see below)	In Small Amounts
<ul style="list-style-type: none"><li>• Eggs (unless vegan)</li><li>• Tomatoes</li><li>• Potatoes</li><li>• Aubergines</li><li>• Peppers</li><li>• Maize</li><li>• Nuts (individually)</li><li>• Sheep/ Goat dairy* (unless vegan)</li></ul>	<ul style="list-style-type: none"><li>• Occasional alcoholic drinks</li><li>• Occasional caffeinated drinks</li><li>• Small amounts of sugar and natural sweeteners like honey and maple syrup</li><li>• Occasional gluten-free grains (oats, rice, quinoa)</li><li>• Occasional peanuts and seeds</li><li>• Gluten- and dairy-free baked goods</li><li>• Shellfish (if eaten)</li></ul>

### How to challenge foods:

We recommend a specific protocol of “bombarding” your system with each of the foods by eating one food at a time – three times a day for three days. If a food is a trigger of inflammation for you, we want you to have the best chance to determine that (rather than silent inflammation sneaking in, causing you unwanted health problems). Per Protocol- the foods listed above -eggs, tomatoes, potatoes, Aubergines, peppers, maize, nuts, goat dairy, sheep dairy.

\*Although we do not recommend that you ever add back in cow's dairy (especially if you have had cancer or autoimmune disease), some people find they can tolerate some forms of goat and sheep dairy.

### Overview:

- Reintroduce only ONE food at a time, by consuming it 3 times a day for 3 days.
- Return to the strict elimination diet for 2 days before trying the next food.
- If you have a reaction, stop eating that food and wait until you are symptom free before you try the next food.
- If you don't have a reaction, allow this food to remain in your diet and continue onto other foods one at a time after 3 days back to the elimination diet.

In small amounts...the remaining 7 categories of foods listed above (alcohol, caffeine, sugar, etc.) can be enjoyed and included in small amounts if you so choose as long as you tolerate them. Add them back in slowly, one at a time, to determine if you can tolerate them in small amounts without any of your symptoms returning.

### What to expect during the elimination phase:

Do not be concerned if symptoms worsen or new symptoms develop with the elimination phase of the diet. Withdrawal reactions from foods which provoke immune responses and chemical sensitivities may include cravings, fatigue, headaches, digestive upset and flares of skin and joint symptoms.

Continue the plan, drink plenty of filtered or bottled water and things will settle - usually within 7-10 days. These responses can be viewed as a positive response to dietary changes as they indicate that a change in the metabolism and chemistry of the body has occurred.

Alcohol and caffeine withdrawal can be particularly severe – especially if they have been consumed in excess previously. Talk to the nutritional therapist or Dr Davies about gradual withdrawal from these to avoid severe withdrawal responses if these have been previously consumed in excess as they may need to be weaned more slowly.

### What to look out for while challenging foods:

An inflammatory response or food sensitivity reaction can be ANYTHING. Anything that is a change in your baseline including, but not limited to:

- Brain fog
- Changes in inflammatory/autoimmune lab markers
- Depression/anxiety
- Diarrhoea/constipation
- Disruptions in sleep
- Fatigue
- Gas/Bloating
- Headache
- Heightened emotions
- Joint pain
- Mood swings
- Rash
- Sleepiness after meal

If you notice one or any combination of these symptoms, then stop eating that food immediately. You can keep track of how your body responds to these foods on the 'Symptom Tracker' Tracking your symptoms on the chart will allow you to gauge which foods you should permanently avoid due to sensitivities or intolerances.

Each week, complete the symptom tracker to calculate your inflammation. Record your weekly score in your Progress Tracker (enclosed) to measure your progress. Rate the following symptoms on a scale of 0-4, based on severity. Your answers will provide a clear baseline as you embark on the programme.

### Resources:

We recommend you purchase a recipe book to help with ideas about what to eat during the elimination phase. Our favourites include:

- Jenna Zoe, Plant Based Paleo: Protein-rich Vegan recipes for well-being and vitality  
[https://www.amazon.co.uk/Plant-based-Paleo-Protein-rich-well-being-vitality/dp/1849756120/ref=asc\\_df\\_1849756120/?tag=googshopuk-21&linkCode=df0&hvadid=310873579424&hvpos=&hvnetw=g&hvrnd=2387463569830918680&hvpone=&hvptwo=&hvgmt=&hvdev=c&hvdvcmidl=&hvlocint=&hvlocphy=1006886&hvtargid=pla-448671516656&psc=1&th=1&psc=1](https://www.amazon.co.uk/Plant-based-Paleo-Protein-rich-well-being-vitality/dp/1849756120/ref=asc_df_1849756120/?tag=googshopuk-21&linkCode=df0&hvadid=310873579424&hvpos=&hvnetw=g&hvrnd=2387463569830918680&hvpone=&hvptwo=&hvgmt=&hvdev=c&hvdvcmidl=&hvlocint=&hvlocphy=1006886&hvtargid=pla-448671516656&psc=1&th=1&psc=1)
- **If eating fish:** Dr Amy Myers 'The Autoimmune Solution'. An excellent text explaining the Functional Medicine approach to Autoimmunity with a full 30-day food plan and a wealth of other helpful advice. She has a 4-week plan for those eating fish in the book.  
<http://www.amymyersmd.com/autoimmunesolutionbook/>

**Symptom Tracking:**

Rate the following symptoms on a scale of 0-4, based on severity. We suggest this is done at the following times:

- Before initiating the programme
- 1, 2, 3 and 4 weeks into the elimination plan
- After re-introducing each new food (as an average score for the 5 days of the re-introduction)

**Symptoms Tracker (for elimination and food re-introductions):**

Symptom	Score before the Protocol	Week 1	Week 2	Week 3	Week 4
<b>Neurological:</b>					
Fatigue					
Anxiety					
Depression					
Irritability					
Mood Swings					
Sleep disturbance					
<b>Gastrointestinal:</b>					
Diarrhoea					
Constipation					
Gas / bloating					
Sleepiness after meals					
<b>Other:</b>					
Headaches / migraines					
Joint pains					
Rashes					
Other significant					
<b>Total Score</b>					
<b>Symptom</b>	<b>Food Reintroduced</b>	<b>Food Reintroduced</b>	<b>Food Reintroduced</b>	<b>Food Reintroduced</b>	<b>Food Reintroduced</b>
<b>Neurological:</b>					
Fatigue					
Anxiety					
Depression					
Irritability					
Mood Swings					
Sleep disturbance					
<b>Gastrointestinal:</b>					
Diarrhoea					
Constipation					
Gas / bloating					
Sleepiness after meals					
<b>Other:</b>					
Headaches / migraines					
Joint pains					
Rashes					
Other significant					
<b>Total Score</b>					

**Notes:**