

## Results and Interpretation Guide

The First Alternatives Food Sensitivity Test found a number of foods that triggered your inflammatory system; the foods in **RED**, **ORANGE**, and **YELLOW** are the ones that were triggered. They are in order by the level of inflammatory response, with the first ones causing the biggest reaction. This inflammation can lead to poor health and disease. These foods need to be eliminated totally for the next 3-4 months. Look at your list and memorize them so you avoid them and the meals that contain them. This is not as easy as it seems because foods come in various forms and often you need to learn how to recognize them and how they are contained in a wide variety of foods and meals. For example, if 'olive' shows up on your reactive list, you must avoid whole olives, but also olive oil. That means any salad dressing that contains olive oil is now off-limits. If brewer's yeast is reactive, then every alcoholic product is off limits because this yeast is used in making beer, wine, and all liquors. Remember, thankfully, this is not forever.

Science has shown that reactive foods are partially responsible for causing inflammation. The first part of this report will deal with the food aspect of the inflammation equation and we will attack the other inflammatory causes in a second report.

So, this means that eating any of these inflammatory foods will cause issues and even eating a small amount of one of these foods will result in continued inflammation and will not help you reduce your clinical symptoms or to promote optimal health and cognitive processing. It is therefore imperative for you to learn exactly what you are eating and take the appropriate steps to avoid these foods. When eating at restaurants, it will be crucial for you to explain exactly what you can eat and how it will be cooked, specifically what oils are used in the cooking process and what spices and herbs and sauces are added. One strategy when eating out is to tell your server that you have a food allergy. They will treat this more seriously than if you tell them that you are sensitive to a food item. In reality, these foods from this test come under the term food sensitivity and not a true allergic reaction.

We have provided some information and tips for most of the foods we test. Read the list for your reactive foods so you can recognize them and learn quickly how to avoid them. Read this

list for your acceptable foods so you can expand your eating variety and are fully aware of ingredients that you need to avoid. If you have questions, you can call us at 954-789-2097.

## Essential Information

1. Any food that you have an allergy to, may still appear in your “safe” list. **It is not safe!** If you have a true allergy, continue to avoid eating that food.
2. When eating any pre-packaged or prepared foods, you must read the list of ingredients very carefully. There are many “hidden” foods in processed and prepared foods that may be on your “avoid” list.
3. While the program will work best if you can completely avoid all of the foods that you are sensitive to, don’t beat yourself up if you have occasional slip ups. If you achieve 90% compliance with our recommendations, you will still see improvement, it may just take a little longer to get back to your optimal functioning.
4. **Avoiding Grains if you are Gluten Sensitive.** This means to eliminate all breads, cakes, cookies, donuts and other products made from gluten-containing grains. We also strongly recommend staying away from the other gluten-containing grains, barley, malt, and rye. Wheat is used as a thickener in many prepared foods, including gravies. Be sure to read the label. The good news is that there are many new grains on the market. If you are gluten sensitive, try substituting quinoa, teff, amaranth, oats, millet, brown rice, corn meal, buckwheat, sorghum, popcorn and montina (an indian rice grass), potato and tapioca.
5. **When eating out,** you might find it easier to explain to your server that you are “allergic” to your dangerous foods. While this is not factually true, you may get a better response from your server, who doesn’t want to see anyone go into shock in their restaurant.
6. **Foods listed as organic** are no safer than non-organic if you have a sensitivity to them. You must avoid that food, no matter what form it comes in.

## Descriptions of Foods and Other Suggestions



**Almonds** are tree nuts native to the Mediterranean Region and the Indian subcontinent, but chiefly grown in California. They are closely related to the peach. Almonds are one of the first fruit cultivated from wild types, showing up in archeological digs from over 3,000 years ago. It is true that wild or native almonds contain enough cyanide to be considered dangerous if a dozen or so are consumed at one sitting. Thankfully, this threat has virtually disappeared. There is a genetic mutation that controls amygdalin, the cyanide precursor. It is a recessive gene and is easily bred out.

Nutritionally, almonds are a very dense food, supplying an excellent protein profile, dietary fiber, B vitamins, good fats and phytosterols that lower cholesterol, minerals, and virtually no carbohydrates. Almonds are used in many diverse ways including the recent upsurge of almond milk as a suitable substitute for cow's milk because of availability (cost), taste, and consistency. Roasted almonds are an excellent snack food because of the nutritional profile and energy provided (100grams yields 885 calories of energy).

Almonds are susceptible to molds (aflatoxins) and consequently, most countries require testing as a condition of importation.



**Apple** It is one the most commonly consumed fruits in the American diet and it is therefore used not only in its raw form, but also in pies, cakes, flavorings, and juices. It is of outmost importance to look at the ingredients list of many foods in order to avoid this food if a reactivity to it was shown.



**Asparagus** Is a common vegetable eaten in many dishes but normally is consumed steamed, sautéed, or grilled. It may be found in some soups and soup dishes where it may go unnoticed.



**Avocado** This tropical green fruit has any number of good qualities and few drawbacks. Avocado is an excellent source of soluble fiber which significantly lowers bad cholesterol and thus, should be considered for those who have lipid conditions. Secondly, avocado oil is an excellent cooking oil because it has the highest smoking point of all the common oils (greater than 600 degrees Fahrenheit).



**Baker's yeast** This type of yeast is different than the yeast used in brewing beer, wine, and hard liquor. It is used to 'raise' different flours to create fluffy baked goods, such as breads, rolls, and similar products. Unfortunately, the key word is a variety of flours. This means that if you are sensitive to Baker's yeast, you must avoid all baked goods that go through this 'rising' process. You can still eat baked goods such as crackers and cookies IF they are made using flour that you can eat. Today, companies are making these products with every type of flour so there are plenty of choices. It may take more work to read ingredients but your health is at stake.



**Banana** Oddly, bananas are considered a leathery berry. They are indigenous to many countries and have a long history of hybridization and cultivation. The current commercial variety, the Cavendish banana, as well as its' predecessor, 'Gros Michel' (discovered in the 1930's) is suffering from the lack of genetic diversity, which lends itself to disease. The Gros Michel has gone extinct and the same may be true for the Cavendish. Breeders are urgently looking for a replacement variety before we lose a commercial category. The Cavendish banana offers around 23 grams of carbohydrate per 100 grams, about half sugar, with a gram of protein.

They are a good source of Vitamin B6 and C, manganese and dietary fiber. Their reputation of being the ultimate source for dietary potassium is miss-placed. A typical serving only contains about 8% of your daily requirement, while cow's milk, many beans, apricots, carrots, and bell peppers contain significantly more potassium. Ripe banana fruit contains serotonin, dopamine, and norepinephrine, which may affect mood and emotions. Banana may appear in desserts and some starches, so read labels if you need to avoid them.



**Barley** Barley is among the gluten-containing grains that are common targets. It is important to point out that the other gluten-containing grains (malt, rye, and wheat) did NOT show a reaction. Each of these grains contains other proteins besides gluten that may have caused a reaction. One or more of these barley proteins may have caused your reaction to barley. Barley may be found in a number of foods that include baked goods, crackers, cakes, cookies, and the like, but is even added to soups and other processed foods. You will need to become ever watchful to avoid it.

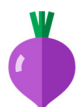


**Basil** Basil is a standard among culinary herbs. It is part of the mint family and is thought to have originated in India where it has been grown for more than 5,000 years. It is commonly used in preparing foods throughout S.E. Asia and Europe, especially Italy and France, and in America. Many different cultivars exist that have resulted in

sweet basil (Italian form), Thai, lemon, holy, and licorice basil. Interestingly, you can find both perennials and annual varieties. It is the main component in pesto, and there are basil with clove, citrus, and camphor scents. Basil prefer warm, dry climates and will wilt under colder conditions. If you need to avoid basil, be careful of Italian and certain Asian foods.



**Beef** Beef is one of the most common meats in our general diet. If beef appears on your avoid-list, you may want to also avoid bison as well as all beef products. That includes items that may contain beef stock. Processed food may contain beef stock in foods that are named ‘chicken’ or ‘pork’. This goes for chips and other non-meat items, so read labels carefully!



**Beet** Beets are the taproot and are typically eaten boiled, steamed, roasted, pickled, or raw in salads or in condiments. Beet soup or borscht is popular among Eastern Europeans and is usually found in most large grocery stores in glass jars. The leaves can be eaten as ‘greens’ in salads or steamed, which resemble cooked spinach. For many centuries, beets are used medically for digestive problems and to help purify the blood. Beet juice is also used as a food coloring.

Nutritionally beets are mostly water (average 88%) and carbohydrates with little protein and no fat. They do contain betaines, a group of compounds that drop homocysteine levels, which have been implicated in causing ischemic heart disease. This makes beets good for preventing cardiovascular disease.



**Bell Pepper** Sweet bell peppers come in a variety of colors ranging from green, yellow, orange, red, and purple; used in stir fry’s and many other dishes but can be hidden as used as a flavoring or spice. Carefully read food listings in all prepared foods and ask about them at restaurants.

All bell peppers, independent of color are included in this food. Common varieties include yellow, orange, and red, although new colors including purple have been developed for commercial use. Since these peppers have a nice flavor profile but are not hot or tangy, they find themselves in a wide variety of salads, soups, processed foods, and many restaurant dishes. Read labels carefully to avoid eating them.



**Black pepper (peppercorns or table pepper)** Pepper is a flowering vine that produces a string of seed pods that are harvested, dried and processed for sale. The leading countries for production are Vietnam, Indonesia, and India. Although black is the most prominent variety, other colors include red, pink, green, and white and reflect

processing at different growth periods. The flavor comes from piperine and not capsaicin so if you need to avoid pepper, you can switch to cayenne or chili types.



**Blueberry** Blueberries are known for their flavor and for the compounds known as anti-oxidants, which fight excesses of tissue-damaging free radicals. They are abundant throughout North America, but also grow wildly in Europe, many parts of Asia, South America, and Africa. They grow on small to medium-sized shrubs and are related closely to cranberries and bilberries. They contain approximately 14% carbohydrates and very little fat and protein, but do contain reasonable levels of manganese, vitamins C and K and some fiber.

Blueberries are used in many different desserts, health foods, juices, smoothies, and as a fresh fruit. If you need to avoid this fruit, look for other berries or sliced peaches, plums, or other fruit.



**Brewer's/Baker's yeast** The yeast used in brewing is similar to that used in baking but after millions of generations and genetic manipulation, it has its' own properties. It is used in brewing beer, fermenting wine, and in making most alcoholic liquors. If you are reactive to this yeast, you must avoid all fermented beverages, which includes beer, wine, and hard liquors. Unfortunately, to be compliant, that means that all drinking is out.



**Broccoli** Broccoli is one of the most popular vegetables. Broccoli is one of the Brassica vegetables, along with Brussel sprouts, cabbage, cauliflower, collard greens, and kale.

Small chopped pieces are often included in vegetable mixes (fresh or frozen), so read ingredient lists on products you buy or ask about broccoli at restaurants.



**Cabbage** Cabbage is a leafy green or purple biennial plant, grown as an annual vegetable crop for its dense-leaved, multi-layered heads. It is derived from the wild cabbage, and is closely related to broccoli and cauliflower, Brussels sprouts, and savoy cabbage. Cabbage heads generally range from 1 to around 7 pounds. Smooth-leaved firm-headed green cabbages are the most common, with smooth-leaved red and crinkle-leaved savoy cabbages of both colors seen less often. In high northern latitudes, where the days in summer are very long, like Alaska and Russia, cabbages can grow in the large range and records can be recorded.

It is difficult to trace the exact history of cabbage, but it was most likely domesticated somewhere in Europe before 1000 BC, although savoy's were not developed until the 16th century. By the Middle Ages, it had become a prominent part of European cuisine. Cabbage heads are generally picked during the first year of the plant's life cycle, but plants intended for seed are allowed to grow a second year, and must be kept separated to avoid cross-pollination. Cabbage is prone to several nutrient deficiencies, as well as to multiple pests, and bacterial and fungal diseases.

Cabbage is prone to several nutrient deficiencies, as well as to multiple pests, and bacterial and fungal diseases. In addition to fresh cabbage, sour-kraut and Kim-Chee are examples of fermented cabbage and should be avoided if this vegetable is on your avoid list.



**Candida albicans** Candida is a yeast species that is often found in the normal human gut flora. Candida is only found in the gut of mammalian species and found in soil, on fruit or other plants. Candida only becomes problematic in individuals who are immune compromised or has a dysfunctional immune system. For this reason, if Candida is reactive in your panel, you should take steps to correct this basic imbalance and heal your gut, and avoid all forms of sugar.



**Cane sugar** While it is impossible to be intolerant to sugar because it is required for life, you only need to avoid chewing on actual cane sugar. Oddly enough, cane sugar is recognized as a relatively common irritant.



**Canola Oil** Canola oil has become one of the most popular cooking oils because it has a mild taste and can be heated so that it can be used in stir fry's and similar frying approaches. Canola oil may be used in oil mixes so please read ingredient labels carefully.



**Carrot** the carrot is a root vegetable and contains high levels of carbohydrates and has a fascinating history. Typically, orange, although now white, yellow, red, purple, and black varieties are grown. Today, the taproot is primarily eaten, but in the past, both the leaves and seeds were commonly used in cooking. It is native to Europe, Persia and SW Asia.

Different varieties can be harvested between 90 and 120 days. Carrots contain high levels of both alpha and beta-carotene and have adequate levels of vitamin K and B6. The myth that carrots can help with night vision can be traced to the British who wanted the Germans to believe this was the case during WWII.



In the way past (2000-3000 BC in Germany and surrounding countries), carrots were grown for their aromatic leaves and seeds rather than their roots. Close relatives, including parsley, cilantro, fennel, dill, and cumin are grown for their seeds.

Today, carrot varieties can be found in a wide range of colors and size, from black, purple, red, yellow, and white.



**Casein** is a protein found in milk and makes up about 80% of all the proteins in cow's milk. It is also the main component of cheese as it curdles out during manufacture. Any reactivity to casein means that milk and milk products such as cheese, ice cream, yogurt, etc. should be avoided.



**Cashew** These tree nuts are generally obvious, but the difficulty is remembering that they may be included in trail mixes, energy and nutrition bars and similar mixes. Because tree nuts are a common allergen, they must be clearly marked in packaging. However, often individuals who are not allergic to cashews forget to check the ingredient list in a given trail mix and go off track.



**Cauliflower** is a Brassica vegetable along with broccoli, Brussel sprouts, cabbage, kale, and collards that is native to modern Syria and is thought to be closely related to cabbage. Cauliflower colors range from the most common white to yellow, orange, green, and more recently purple. Boiling cauliflower rapidly destroys crucial nutrients so steaming and stir frying are preferred cooking methods. China and India are the leading world's producers of cauliflower.

Cauliflower is very low in fats, protein, sugars, and fiber, but has lots of vitamin C, B, and K. If cauliflower is on your list of reactive foods, substitute the other Brassica vegetables, if acceptable, or other non-reactive vegetables. Typically, it is easily recognizable and thus, easy to avoid.



**Celery** There is a range of different celeries used in foods around the world. In this country, we eat the stalk raw with various additives, chopped in salads and other foods, or cooked into soups and stews and stir fries. In Europe, they use the celery root and leaves in soups more than we do. The root bulb, celeriac, can be stored for months, and is an excellent ingredient for soups and stews. Celery seed is used as a spice and in perfumes.

Medically, celery extracts are known to reduce pain and lower blood pressure, but can increase photosensitivity. Celery should not be used in pregnancy due to uterine activity. Celery contains small amounts of carbohydrates and sugar with little protein, but has plenty of dietary fiber and is sometimes recommended for weight loss. Additionally, it has lots of vitamin K and folate.



Celery is known to induce true allergic (IgE) reactions, which can result in anaphylaxis. The allergens are not destroyed by heating so caution must be urged if initially introduced to celery. Celery and celery seed are used as seasoning so if you are to avoid celery, read labels carefully.



**Cherry** Cherries can be found as sweet cherries for eating and sour cherries, used in cooking and as a flavoring. Cherry is a member of the prolific rose family and grows on small-to-medium trees. Typical sweet cherry varieties include Bing, Ulster, Rainer, and Royal Ann. Cherries are among the seasons' first fruit, arriving in May and gone in June. The top producing countries include Turkey, the United States, Iran, Spain, and Italy. The cherry is now considered to be from Europe and Western Asia and not from temperate Central Asia as pits have been found in European pottery dating back several thousand years.

Cherry fruit contain some vitamins but the sugar content is quite high so be careful if you are dieting or diabetic. There are plenty of other fruit choices if you must avoid cherries but not many fresh flashy varieties until later in the summer. Check labels as cherry extract is used extensively for flavoring.



**Chicken** Our current chicken is derived from the red or grey junglefowl of the northern Indian subcontinent. It has become one of our primary and common protein sources. Chicken is found in every culture on earth, except for the Eskimo. It is served hundreds of different ways owing to the ability to be neutral and absorbs the flavors it is cooked with. It is prepared as sausages, cooked in stews, grilled, broiled, fried, stir fried, and many other methods. Today, it is sold as 'friers' (very young birds), broilers (6-8 week old birds), and as roasters (8-10 week old).

One hundred grams of chicken meat contains 3-4 grams of fat and 31 grams of protein compared to 10 and 27 for beef. The saturated fat is concentrated in the skin. It should be cooked to 165 degrees F to kill off any harmful bacteria.

There is much controversy because much of the commercial breeders raise their birds using an arsenic compound and use antibiotics, which is environmentally unfriendly.

Now-a-days, one can purchase hormone-free or cage-free or antibiotic-free or combinations of these practices from health food stores and even the regular chain grocery stores carry some versions of these higher-end chickens.



**Chickpea** Chickpeas, a legume, grow in the traditional peapod in low bush-like plants, but typically have only two or three peas per pod. Chickpeas are called garbanzo beans in some cultures. Chickpeas are made into dozens of various meals in

cultures that range from India to Middle East to America. Hummus and falafel's have become commonplace in this country. In poorer regions where chickpeas grow, the young leaves are used as a green vegetable.

Nutritionally, chickpeas are a nutrient dense food with the highest protein levels of all beans and peas. They average 9% protein, 27% carbohydrate, and 3% fat. They are a good source of the amino acids, lysine, isoleucine, tryptophan, and the aromatic group, which are often in low amounts in many protein sources. They are also a good source of fiber, folate, various minerals and vitamins. During WWII, because of coffee shortage, roasted chickpeas were brewed in place of coffee. Chickpeas have been traced back to Turkey approximately in 3,500 B.C., signaling it was one of the earliest cultivated plants.



**Chili pepper** Chili peppers are used in chili and many other processed foods. Read labels thoroughly if you suspect hot or spicy ingredients.



**Cinnamon** Cinnamon is a common spice and ingredient that is the dried inner bark of one of about a dozen small trees from the Cinnamon family. Bark is stripped and the inner bark is processed and quickly dried and cut into usable pieces. It has been used since ancient times and there is literature support dating back to 2,000 BCE.

Cinnamon contains just less than one percent cinnamaldehyde, an essential oil with a hot aromatic taste that is among the many biologically active compounds. Cinnamon has been identified as an agent useful in transporting serum glucose into muscle cells and has been added to various insulin-resistant herbal preparations and weight loss products.

Cinnamon is grown and produced chiefly in China, India, Sri Lanka, and Vietnam. Mexican chocolate derives its' distinctive flavor from cinnamon. Cinnamon is used as a spice and an ingredient in various desserts and meat and vegetable food products. If you should avoid cinnamon, please check ingredient lists carefully and avoid all foods that contain even traces of cinnamon because of the extremely biologically active compounds.



**Cocoa (basic ingredient in chocolate)** Chocolate is one of the world's greatest foods, according to many. It is derived from the cocoa bean, which is lightly fermented (to avoid extreme bitter taste), dried, cleaned, roasted, and ground. Cocoa is split between cocoa solids and cocoa butter, while the solids are high in flavonoids that serve as antioxidants. Commercial sweet and milk chocolate is comprised of various amounts of each component with milk and sugar added for consistency and taste. It is often processed with vanilla for added flavoring. About 70 percent of the world's chocolate is grown

and processed in West Africa, centered around the Ivory Coast. There is world concern over the use of child labor that has led to fair-trade chocolate

One hundred grams contains 540 calories, and is comprised of approximately 60% carbohydrates, 30% fat, and 10% protein. It is rich in riboflavin, B12, manganese, phosphorus, zinc, calcium, magnesium, and iron.

Chocolate is universally served as a beverage, sold as various candies and appears in many desserts and related food products. Not only does most chocolate contain milk but it is often included in some trail mixes and other food preps. You must avoid chocolate regardless of cocoa content or listed as 'organic'. Avoid even small amounts.



**Coconut** The coconut palm plant is one of the most useful plants and fruit in the world. Coconut meat, milk, and water is used in hundreds of food items in tropical countries. It is thought to have originated near Indonesia and has spread globally throughout the tropics.

100 grams of coconut has 354 calories, 33 grams of fat (89% saturated) and 24 grams of carbohydrates. It is used as a cooking oil and is used in many diverse products such as cosmetics.

If you are reactive to coconut, there are alternatives that include avocado, canola, sunflower, safflower, corn, and even tree nut oils.



**Coffee** Avoid coffee regardless of the caffeine content, coffee flavoring, coffee ice cream, or anything that smells or tastes like it. Hopefully, this will not be a huge challenge. If you are a normal coffee drinker, try non-cola caffeinated drinks, tea, or other stimulants.



**Corn** corn is another extremely common food ingredient. Corn, corn proteins, and high fructose corn syrup is used in hundreds of products as a protein and often as a sweetener. While HFCS is mostly a sweetener it does contain small amounts of corn proteins, which is the components causing inflammation. Read ingredients panels carefully to avoid corn.



**Cow's milk** Milk is used in hundreds of products and great attention must be made by reading labels. Milk products include butter, chocolate (except the very highest cocoa blends), condensed milk, cream cheese, ice cream, cottage cheese, kefir, powdered milk, skim and non-fat milks, most soft cheeses, yogurt (Greek, low-fat, and all

others except soy), most baked goods, some margarines and creamed sauces, as well as guar gum. You will be saddened that milk proteins have been added to soups, potato chips, breads and other baked goods (cookies, cakes, crackers, and so forth), and many other items.



**Cucumber** Cucumbers are the fourth leading commercial vegetables grown in the world. They are technically fruit grown on creeping vines and come in three categories slicing, seedless, and pickling. The world's leader by a factor of 25 is China, but they are grown in almost every country, with dozens of varieties, of which only about ten are found in the US.

Cucumbers are a good source of the B vitamin family and vitamin K. Besides a food, cucumbers have helpful qualities for rehydration, skin, bad breath, hangovers, gastrointestinal issues, arthritis inflammation, and sugar control.

In addition to traditional uses of cucumbers, they are ingredients in juices, sodas, and condiments. The Greeks make tzatziki with yogurt and cucumbers as a traditional component of their meals and the Chinese use cucumbers creatively in a wide range of foods.



**Egg White** Egg white is the non-yolk portion of the egg and primarily consists of water and 10% protein. Its' function is to protect the embryo and to provide food for the growing fetus. Since it contains no carbohydrates or cholesterol, it has gained popularity for low-cholesterol meals. The proteins found in the egg white are different from that found in the yolk.

Finding a substitute if you are reactive may prove difficult, depending on what you are preparing.



**Egg Yolk** Egg yolk is the core of the egg, which is packed with nutrients to supply the growing embryo. It has dense protein, lipids, vitamins, minerals and other essential compounds. Because there are many proteins, many individuals develop a sensitivity to one or more of these proteins.

It is possible that you can still eat egg whites if you are reactive to yolks. If not, you'll need to find another protein source.



**Eggplant** Eggplant is part of the nightshade family, closely related to tomato and potato, native to India. China and India grow seventy-five percent of the world's eggplant. Although, we are exposed to only a few different varieties, worldwide there are dozens that range in both shapes and colors. In addition to the typical purple and the rarer

white shades, there exist orange, green, bi-color, and shades in-between. Many are elongated or oval, others are round or even segmented. They are stewed, grilled, roasted, eaten raw, and included as part of other recipes, adding interesting flavors to many dishes. Eggplant offers very little protein or support from vitamins or minerals.

If you must avoid them, they are easy to spot and easy to substitute for with other vegetables, or even fruits.



**Garlic** Avoid fresh (either whole, peeled, or minced), powdered, or other forms of garlic. Garlic is such a common spice that it is worth reading ingredient lists carefully.



**Ginger** Ginger is the rhizome of the flowering plant. Ginger is a perennial herb and is in the same family as turmeric and cardamom. It is thought to come from either India or the rainforests of SE Asia. It is used fresh, pickled, dried, and some other variations in cooking throughout the world. It is used to calm the stomach and gut and is the primary component in ginger ale.



**Gluten** Gluten is technically two different proteins that are intertwined together that comprise the primary protein in gluten-containing grains (wheat, barley, rye, and malt). Gluten is responsible for the physical properties that make flour flexible and stretchy, making it perfect for breads and pizza dough.



**Goat's cheese** Any cheese made from goat's milk is considered goat's cheese. The most common goat's cheese in our culture is feta, but there are other possibilities.



**Goat's milk** Goat's milk is used as an alternative to cow's milk, although some cultures are based on it rather than cow's milk. In similar fashion to the gluten-free movement, there are more products made with goat's milk, including many cheeses. One can find goat's milk alternative ice creams, yogurt, butter, and most traditional cow's milk products. The good thing is that you would have to look specifically for them.



**Grape** Avoid fresh, dried grapes (raisins), grape jelly and jams, or juices that may contain grape juice. Grape juice can be difficult for the following reasons (1) it is sometimes substituted or (2) added to other fruit juices because of its flavor profile and its sweetness. You will need to read labels carefully to avoid this ingredient. Grapes are occasionally used to sweeten various prepared foods so read ingredient lists carefully. There is one brand of BBQ sauce that uses grapes as a flavoring ingredient.



**Green beans** this very common vegetable is used fresh, frozen, canned, and even dried. Be vigilant. This is one of those foods that you forget is on your 'avoid' list and wind up eating a healthy serving.



**Green pea** Green pea is very familiar as a vegetable and thus easily avoided. However, green pea protein is an excellent source of amino acids and energy and since it is a vegetable (and not a meat), its' use has been on the rise. You will find it in protein bars and shakes, processed foods, and various other foods. Please read labels carefully to avoid this ingredient.



**Kale** Kale is a member of the Brassica family of vegetables, along with broccoli, Brussel sprouts, cabbage, cauliflower, collards, kohlrabi, mustard, rutabaga, and turnip. Kale grows either white or purple leaves and is open-headed, meaning it does not form a head as does cabbage and Brussel sprouts.

Kale is included in dozens of recipes throughout the northern hemisphere where it grows well in colder climates. It is particularly nutritious with marked amounts of vitamins K, C, E, B6, folate, and thiamine, with decent levels of minerals, especially manganese.

If kale is reactive, look for other green leafy vegetables for substitutions.



**Kidney bean** Kidney bean is a variety of the common bean. There are a number of kidney bean varieties ranging from white to red to speckle. They are native to Central America and Mexico but are now grown around the world and used in many different recipes. However, raw kidney beans contain a toxin, which damages red blood cells and interferes with cellular metabolism. Raw beans also contain an alpha-amylase inhibitor. Thorough heating destroys these toxins. Great care must be maintained to make the bean safe, and thus canned beans are a good source of ready-to-prepare beans.

Nutritionally, kidney beans are a good source of protein and have enough carbohydrates and fibers to make them an excellent food source. Beans are between 9 and 12% protein.

Some individuals experience gas, bloating, and diarrhea from beans so caution is warranted until you know how they will react to your gut.

If kidney beans are reactive, you will need to get your protein, carbohydrates, and fiber from other sources. Thankfully, you should have many choices.





**Lemon** There are two theories regarding the origination of lemons, that they come from the region where northern India and China merge or they are a hybrid between the bitter orange and the citron. There are several commercial varieties used in the States.

Lemons have many culinary uses so you will need to read labels carefully if you should avoid them. If you are sensitive to lemon, you may also want to avoid lemon thyme, lemon verbena, lemon balm, and limes, as they contain many of the same compounds.



**Lentil** Lentils are a legume with a dozen or more varieties. They appear in pods on an annual plant that grows approximately a foot and a half. Lentils are known for being drought tolerant which makes them functionally popular. The earliest recorded use goes far back as 13,000 years. They are eaten throughout the world but are a main food in India and surrounding countries. They are mixed with a wide variety of other ingredients based on cultural practices. Canada, India, and Australia are the top three producers of lentils. In the United States, they are grown in the NW and in North Dakota mostly.

Nutritionally, 100 grams equates to approximately 350 calories. Sixty-three percent are carbohydrates, 25% protein, 11% fiber, and only 1% fat. They contain phytates, which reduce the bioavailability of dietary minerals, which is a major drawback. Thorough soaking for more than twelve hours extracts most of the phytates, so canned lentils are an easy-to-use process.



**Lettuce** Lettuce is a member of the daisy family and was originally cultivated from a wild plant in Egypt. Lettuce includes several cultivars (varieties) that include butterhead (Boston), iceberg, leaf, and romaine. They are rich in vitamins K and A, folate, and iron, with the darker varieties have moderate levels of beta-carotene.

Since lettuce is mostly used fresh in salads they are subject to food-borne diseases such as listeria. If you should avoid lettuce, try substituting arugula, kale, or spinach.



**Lime** Lime is a hybrid citrus fruit noted for its' high Vitamin C content, green color, and aroma. There are more than a dozen varieties grown today in tropical regions of the world.

Nutritionally, limes are mostly water and around 10% carbohydrates and little else. The rind contains a number of compounds, but they are not of importance since the rind is not eaten in any quantity.

If you are reactive to limes, you can switch to other citrus fruits, if possible.





**Malt** Malt is sprouted barley that is then roasted. Malt contains gluten. It is often fermented to make beer, but is used as a flavoring in various foods. You will need to read ingredient lists carefully to avoid it.



**Mushroom (common or button mushroom)** Technically, mushrooms are fungi, neither a true plant nor an animal. They do not synthesize their own food but take it from sources like trees via enzymatic action. Thus, they are extremely helpful in breaking down organic matter.

Mushrooms can be found fresh, canned, frozen, and dried. It is included in salads, soups, and many different products. While easily spotted, it falls into the category of so common, you forget that you're eating them, so be careful to avoid them if you are sensitive to them. For the next three months, please avoid all mushrooms, including the specialty varieties.



**Mustard Seed** The most common uses of mustard that we encounter are 'mustard' blends, such as French's mustard, 'brown', 'spicy', 'ball-park', Heinz, and Dijon types. In addition to these blends, mustard seeds and ground seeds are used as a spice in cooking. Mustard greens are steamed and cooked like collards and similar plants. If you are trying to avoid mustard seed, read ingredient labels carefully.



**Oat** Oats are not a cereal grain, like wheat, barley or rye., and do NOT contain gluten. However, if you are trying to avoid gluten, purchase oats that are processed in gluten-free plants. Oats are found in diverse products that include oatmeal, cookies and other baked goods. Be careful to read ingredient lists. Gluten-free oats do not contain gluten but traditional oatmeal may have been processed along with wheat products, and thus are contaminated with gluten, and if you must eat gluten-free, be sure to avoid these oatmeal products.



**Olive** There are dozens of olive varieties that are processed differently, resulting in all kinds of black and green olives. If olive is on your avoid list, avoid olives as well as olive oil. It doesn't matter if the olive oil is labeled organic or not, you must avoid it. Be aware that olives are often found in salads, pizza, and other prepared foods.



**Onion** Onion without question is one of the most common vegetables, although technically, it is a root vegetable and is full of sugars. Onions come in a wide variety of types including sweet, mild, yellow, red, and tangy. They are used to flavor and even to sweeten dishes. They are frequently added to vegetables mixes (fresh, frozen, and canned)

and added to prepared products. Be aware of onion powder or onion salts that are added to soups, meats, prepared products and many other items.



**Orange** Everybody can identify an orange so that's the easy part. Orange juice is sold separately but also added to many other juice mixes and used to sweeten trail mixes, bars, cookies, and other items. You must be careful to avoid orange that appears in a variety of products.

Parsley is loaded with antioxidants, vitamins A, C, and K. A small amount will give you enough vitamin C to provide your daily levels. If you are sensitive, read labels carefully as parsley is used as a spice in many preparations.



**Peach** Peaches and nectarines are considered cultivars of each other and genetically different on one allele that manifests either 'peach fuzz' or a smooth skin (nectarine). Records show that peaches are native to NW China where records indicate cultivation as far back as 8-10,000 B.C. Peaches belong to a group of fruit from the rose family that includes cherry, apricot, plum, and almond. The flesh is ranges from white to yellow. There are dozens of various cultivars and one of the most popular summer fruit in this country.

Unfortunately, the peach tree is vulnerable to several insect, bacterial, and fungal diseases. China leads the world in world production with 12 million tons, but the US is fourth (1 million tons).



**Peanut** The peanut is technically a legume (peas and beans) that develops underground, and are not a true nut. Peanuts are annual plants and are somewhat unusual in that they cannot use the nitrogen from fertilizer but use bacteria in the roots to produce nitrogen. This process actually delivers nitrogen back into the soil, and the peanut crop is typically part of crop rotation. The peanut is a hybrid that originated in northern Argentina/southern Bolivia. The oldest documented use of peanuts dates back 7,600 years in the Argentina-Bolivia region. There are more than half a dozen different cultivars grown commercially today throughout the world.

Nutritionally, the peanut has a great deal of oil, protein (25 grams per 100 grams of raw peanuts), vitamins, and minerals. The skin contains resveratrol, a suburb antioxidant.

This is another common food that is also an allergen. Remember, there is a distinct difference between an allergy and food sensitivity. A food that triggers an allergy reaction will show an effect in terms of minutes to several hours. However, a food that triggers a sensitivity begins

by initiating an inflammatory cascade. The effects of these reactions may take several days to manifest.

The peanut has both food and industrial uses. From a food perspective, peanut oil is common oil and the nut is eaten in many forms. Peanuts used today as whole peanuts, raw or roasted, and the main ingredient in peanut butter. Peanut flour is also produced and is used in commercial bakery products. Peanuts are often included in trail mixes, energy bars, and related products. Peanuts are used in many diverse products, so you radar will need to be on the lookout. Due to the history of peanut allergies, products that contain or may contain peanuts are clearly labeled. The oils are used in a wide variety of industrial products that range from paints to soaps.



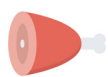
**Pear** There are literally almost several thousand pear varieties across the globe. China produces the most followed by the United States. Pears are native to Europe west to China.

Nutritionally, pears are mostly water, carbohydrate, and fiber with only small amounts of protein and fat.



**Pineapple** Pineapple is native to Brazil, and is grown in Costa Rico, Brazil, and other regional countries. Pineapple is a coalesced berry. It can be eaten fresh, cooked, juiced, or preserved. It is high in manganese and vitamin C but little else. Pineapple contain bromelain, a powerful enzyme and pineapple should be avoided in pregnancy, those with allergies, or those taking anticoagulants. Pineapple growers tend to use extremely high levels of pesticides so be wary. Unfortunately, there are few 'pesticide-free' fruit available in the marketplace.

If you are sensitive to pineapple, avoid fresh, juices, canned or frozen pineapple. Be aware that some fruit juices and canned fruit mixes will contain pineapple juice or pieces.



**Pork** Pork meat is one of the major meats eaten in this country. Most sausage and bacon is made from pork, although there are chicken and turkey options. Pork is also used in baked beans and other processed foods.



**Potato** Recently avoiding potato has become complicated with the increasing use of potato flour to replace the gluten-containing grains. Avoiding potato as a starch such as chips, French fries, baked, fried, boiled potatoes, mashed, potato pancakes, and potato salad is relatively simply. However, with the increasing use of potato flour to help

thicken and improve texture in foods, avoiding potato is much more difficult. You will find it in baked goods, soups, processed foods and dinners, and other items. Recently, I have found potato listed in health bars and non-potato chips.



**Rice** This includes white, brown, red, black, sticky (Oriental), rice flour, rice powder, and rice proteins (protein shakes and similar products). It is used both as a starch as well as a source of protein and appears in many different food products. Be careful to avoid eating it as a whole grain or as a protein source. One good thing about rice is that it is not a gluten-containing grain.



**Rye** Rye is a cereal grain in the barley and wheat family. Originally from Turkey it is now grown in central Europe. It has an advantage as it can be grown in various soils and climates with good yields. It is susceptible to ergot infection, which can cause serious illness.



**Safflower seed** Safflower is used as a cooking oil and often added to 'vegetable oil' mixes. Again, read labels carefully to avoid using it.



**Salmon** Avoiding the fish is typically easy, but remember that omega-3 fatty acids (fish oil) is often made from salmon and you will need to read the labels carefully. Salmon includes numerous types but also comes from a variety of different locations (different countries, and both wild and farmed types) and thus, can be confusing so make sure you avoid all salmons.



**Sardine** One issue that comes with sardines is the confusion with anchovies. Both anchovies and sardines are similar and are often confused or interchanged at the food source level. Our suggestion is to avoid both fish. If you take fish oil nutritional supplements, make sure they aren't made from either sardines or anchovies.



**Shrimp** These are many varieties of shrimp but you must avoid all of them. Shrimp are prepared as appetizers, primary foods, used in salads, soups, casseroles, and many prepared foods.



**Soybean** soybean, like cow's milk, is found in many diverse food products. Soybean may be found in soy sauce, tofu, miso, soy milk, soy cheese, tamari, tempeh, soy sprouts, and most vegetable cooking oils. Additionally, soy is found in some of the following foods chocolates, hot dogs, mayonnaise, noodles, flavoring pastes and condiments.



**Spinach** This common green leafy vegetable is both common and touted as a very good vegetable. However, spinach is causing you trouble and you must avoid it for the time being. You may reintroduce this vegetable when re-introduction begins in the 4<sup>th</sup> month, assuming you have been very compliant in avoiding it. Spinach is used in salads, as an ingredient in quiches, many other main dishes and as a vegetable. Read ingredient lists carefully or when ordering in restaurants.



**Strawberry** The common strawberry is an extremely popular fruit with a distinct flavor and aroma. The leading countries for commercial growers are the United States, Turkey, Spain, Egypt, and dozens of other countries. They have high levels of vitamin C and have potential medical uses that include anti-inflammatory, hypertension, cardiac, cancer, and for cholesterol issues.



**Sunflower** Sunflower seeds are easy to spot and avoid, as they may be added to salads and health and nutrition bars. However, sunflower oil must also be avoided. It is often a component in cooking oil and often appears in vegetable oil blends that are sold commercially and used in many restaurants. You will need to read labels at the store to avoid blends that contain it and ask that your meals are prepared using other acceptable cooking oils. Thankfully, you have choices that include almond oil (quite expensive), canola, coconut, cottonseed, peanut, safflower, and sesame oils. Some of these oils degrade at lower temperatures.



**Sweet potato** sweet potatoes are also known as yams. Technically, there are a number of yam and sweet potato varieties that you should avoid. They are root vegetables and are full of sugar (like potato and carrot). For the most part, except for candied yams, they are easy to recognize and should not be too difficult to identify.



**Tapioca** Tapioca is the starch derived from the cassava root. The cassava plant is native to the NE regions of Brazil, which was spread by traders to the Caribbean, Africa, and to Asia. It is found in most cultures although it is not a primary starch in Europe. Because it meets several key criteria for gluten-free preparations, it has become a popular substitute in gluten-free breads and other foodstuffs, especially in this country. It is commonly called manioc flour.

Cassava is a perennial scrub which thrives in poor soil and therefore is a useful ingredient in many regions where soil is of poor quality. It is a thickening agent that has hundreds of forms and uses, partly because of the chewy nature of some of the preparations. The root contains

linamarin, a cyanogen glycoside, which can cause a cyanide-derived illness. Thus, the preparation of the root must be carefully planned to extract the linamarin to avoid poisoning.

Tapioca is atypically thoroughly dried and requires soaking in much water to re-hydrate it prior to use. It is sold commercially as pearls and flakes, among other forms. Nutritionally, tapioca is devoid of all nutrients except carbohydrates and adds nothing for energy except sugars. The leading countries of production are Thailand, Brazil, and Nigeria.



**Tea** this includes all types of black or green tea, which should be avoided. However, fruit teas like blueberry, lemon, or raspberry.



**Tilapia** Tilapia is any one of 100 different temperate freshwater species of the cichlid family, although there are only four commercially available in this country. They have become controversial because they are listed as invasive in certain regions although some communities deploy them to control duckweed and other plants and they will consume large amounts of mosquito larvae. As an invasive species, they are limited because they will not tolerate colder water, although they live in restricted Idaho areas in the nuclear plant runoff.

A number of factors have made them widely popular in aquaculture around the globe. Consumers like them because they are inexpensive, easy-to-prepare, possess a mild flavor, high protein content, are extremely low in mercury and other metals, low in saturated fat, calories, carbohydrates, and sodium. Growers like them because they tolerate poor water quality, high densities, grow quickly, plus they can survive on a vegetarian diet. Growers have started adding flaxseed to the food supply to increase omega oils in the processed fish. There has been an issue that tilapia have high levels of omega-6 fats, which are pro-inflammatory. Thankfully, consumer pressure has forced changes in the aquaculture practices to lower these levels.

China, Central America, and Egypt are the top regional producers of tilapia.



**Tomato** Tomato is one of the most common ingredients used in our foods. Like egg and wheat, tomato is just as common and difficult to avoid. Avoid all varieties of fresh tomatoes, tomato sauces and juices, ketchup, salsa, pizza sauce, pasta sauces, and red juices. Tomato is used in salads and vegetables mixes and an ingredient in many cooked meals. It will take a careful eye to avoid tomatoes in all their forms.



**Trout** Except for two species, trout are members of freshwater groups which inhabit cold-weather streams, ponds, lakes and rivers. Common species include rainbow, brown, river, lake, brook, golden, and cutthroat trout. They are a major source of



food for many predators including bear, eagle, mink, and other northern species. Their color tends to reflect their environment as they are excellent at camouflaging. Trout primarily feed on small fish, flies, dragonflies, worms, and crayfish. They tend to be bony but have excellent flavor. The entire sport of fly-fishing has grown up around trout as they respond to surface action that simulates insect behavior.

Nutritionally, they have a good amount of protein (around 20 g per 100 g fillet), cholesterol and only a small amount of fat. They tend to be low in toxins and metals.



**Tuna** Tuna represents a group of saltwater fish that tend to be large, with names such as the Atlantic Bluefin, albacore, skipjack, and big eye. Many have been overfished, especially the southern Bluefin, which is on the verge of extinction.

Tuna is an excellent source of protein but because it is a major predator, may contain higher levels of mercury, cadmium, lead and other heavy metals, making it unfit for frequent use.



**Turkey** Turkey meat has become quite common, as it is sold as a ground meat to be made into a wide variety of dishes, as is ground beef. Turkey is found in salads, soups, and many processed foods, so you need to read labels carefully if you need to avoid it.



**Turmeric** Turmeric is a flowering plant native to SE Asia and is related to ginger. Like ginger, the active ingredients are found in the rhizomes (roots). Turmeric requires large amounts of rain and relatively warm weather to grow (68 – 88 degrees F).

The rhizomes are initially boiled and then dried in hot ovens and then ground into a fine powder. The dried powder offers the unique color and aroma. The active ingredient is curcumin and related molecules. Curcumin has been recognized for its' strong anti-inflammatory and healing properties. It has been used in Ayurvedic medicine for centuries.

Turmeric is a component in various curries so if you need to avoid it, check ingredient lists of curries and various foods.



**Vanilla** Vanilla is an extract from the vanilla bean. It is used as a flavoring in many products, besides ice cream and other desserts. Please read ingredient lists carefully to avoid it.



**Watermelon** Watermelon is a mostly obvious fruit, it is now found in many fruit drinks, smoothies, and related products. Be watchful of watermelon as an



ingredient in these products.



**Wheat** Wheat contains gluten and other proteins. Wheat is extremely ubiquitous and found in hundreds of foods in so many different categories. Our culture has evolved based on wheat and many individuals have great difficulty in eliminating them.

Remember, wheat is the foundation or found in most baked goods, crackers, cakes, cookies, and the like, but is even added to soups, deli meats, and many processed foods. You will need to become ever watchful to avoid it. Thankfully, there are many more gluten-free products on the market. Many of these non-gluten grains use rice, corn, potato, or other non-gluten grains so check the ingredient list.



**Whey** Whey is the liquid left over after milk curdles and is also a by-product of making cheese. There are two types of whey, “sweet whey” produced from making hard cheese like Cheddar and Swiss, and “acid whey” made from making cottage cheese and yogurts.

Whey is primarily protein with some sugars and almost no fat. The proteins are lacto-globulins, immunoglobulins, and some peptones. Whey protein is incorporated in many different nutritional products and is used in protein products for body building and health products. Since whey may contain lactose, those who are lactose-intolerant should avoid whey products. If your test indicates that you are sensitive to whey, avoid whey protein in all forms.



**Yogurt** Avoid all varieties of yogurt regardless of the type or brand Greek, low-fat, etc. Avoid yogurt covered items and check ingredient lists of prepared foods.



**Zucchini Squash** There are a number of commercially available varieties and you should avoid all of them for the next three months. From the traditional group that includes acorn, buttercup and butternut squash. From the summer squash groups, avoid zucchini (green) and the yellow squashes. When you have re-introduced these foods, they make an excellent alternative for beans, corn, pasta, potatoes, and the like.

## Avoiding Grains

You have the unfortunate circumstance of being sensitive to wheat. Since wheat is indicative of gluten, we strongly recommend staying away from the other gluten-containing grains, barley, malt, and rye. This means to eliminate limit all breads, cakes, cookies, donuts and other products made from gluten-containing grains. Health food stores have gotten a lot better about

offering products made from alternative grains and the makers have succeeded in making these products have similar taste and texture to their wheat counterparts. You can look for products made from amaranth, buckwheat, corn, millet, potato, rice, quinoa and tapioca. This category may give you the biggest challenges, but is very do-able.

=====

Developing a proactive strategy for avoiding your key items is especially important. Thankfully, you have several other choices for each food that should make your task easy. So, planning ahead and purchasing the appropriate choices will be at the heart of these strategies.

## Will These Foods Always Cause Inflammation?

NO. The process of food sensitivities is a dynamic process based on a number of factors that include gut permeability, your gut bacterial mix, stress, and other factors. Your gut bacterial mix is crucial. Prior antibiotic use (which includes going all the way back in time to your baby and teenage years) is a very important factor in killing off the 'good bacteria'. This is the reason why taking a wide array of probiotics is so important. The manner in which this is done is part trial and error and will be covered later. The goal is to have an acceptable mix of healthy beneficial bacteria that will allow you to heal as much as possible. We know that if you avoid a given food for approximately 16 weeks, it is highly likely that the sensitivity to that food will greatly diminish or disappear altogether. The longer you stay away from a given food, the higher the chances are that the sensitivity will diminish. However, some foods have a genetic component meaning that a given protein in a food will always cause sensitivity. We will only know this by repeat testing over a period of several years. Our research shows that specific individuals typically have 3-5 foods that meet these criteria.

## If I Follow These Recommendations, How soon should I Expect to See Results?

The reduction of clinical symptoms such as decreased arthritis inflammation, elevated blood pressure and blood glucose, excess weight, and many others are individual-specific. Some clients

begin to see changes within several weeks while others do not see them begin until weeks 8-10, and rarely, not until three months have gone by. If you are compliant and really vigilant, most everybody notices changes by week ten. Improvements will continue through six months. Re-introduction can begin after 12 weeks or 3 months.

## How to Begin

There are two important aspects to following the food sensitivity guidelines. The first, as we have discussed, is to faithfully avoid those foods that trigger inflammation. The second and maybe the easiest strategy are to cook using foods from the green or acceptable food list. By preparing your own meals, you will know exactly what ingredients you are using and a second benefit is that they are most likely fresh. The key is to develop a series of strategies for eating healthy and for eliminating those reactive foods. We have provided a number of examples from former successful clients. You may find those examples on our website or by using our blogs.

By carefully examining your acceptable foods, you will find numerous acceptable green and yellow vegetables that you may eat. Just because you haven't been eating a specific vegetable, doesn't mean that you can ignore it forever. Similarly, there are a number of different fruits that are on your acceptable list. That means that there should always be fresh fruit available at the grocery store. We have gotten use to the concept that there are always fruits available all year, but remember, some of these are imported from countries that have fewer controls and we don't always know how they were grown and how many and the level of pesticides were applied. Washing fruits may be helpful but will not eliminate toxins within the fruit. Another strategy is to purchase fruit grown in this country.

You have various protein sources protein sources that are non-inflammatory (acceptable) for you. Protein sources include beef, chicken, and pork as well as the many fish and shellfish on your list. Look over your list and include those in your good list on your menu. The same is true for the nuts on your acceptable list. One strong advantage of using nuts is that you can carry them with you while away from home. It is a great strategy to use them to avoid getting too hungry between meals. Combining these nuts with dried fruit adds some sweetness and may be helpful, as long as you watch your glucose load.

## A Word about Diversity as it Applies to Eating:

It is well known among food scientists that eating a wide variety of different foods is the most healthful way to eat. Now there are studies that confirm this and the reason why. By mixing different foods, we get the benefits of the many helpful compounds in different foods, called phytochemicals. As it turns out, this mixing has more than an additive effect, it actually is exponentially beneficial. Too often, we tend to eat the same set of vegetables and the same meats, and the same fruits, and the same starches. If you study the foods from the green results block, you will most likely see plenty of foods that you just don't eat. They are in the stores right under your nose, but you just walk by them. We challenge you to eat at least one uncommon vegetable each week and the same for each category.

## Is Eating Less of an Inflammatory Food Truly Helpful?

The answer is undetermined from a scientific perspective. While it is logical that eating tiny amounts of a given food should not cause the same reaction that when eating a healthy portion. In the case of herbs and spices, one tends to consume only small quantities and that may mitigate any concern.

However, there is evidence that even small amounts may trigger a negative reaction. We know that immune system reactions that are triggered with small quantities of what amounts to a toxin. For the next twelve weeks, it is very important that you avoid the foods that trigger inflammation. Even small amounts of an inflammatory food may continue the cycle and delay your full recovery. I would never tell a client that cutting down on a specific food is bad but your goals should be complete elimination for this period.

## The Science behind Inflammation:

It has only been since 1999-2000 that Dr. Alessio Fasano while working at the University of Maryland, discovered and reported in the scientific literature on a protein called Zonulin. Once released in the body, Zonulin is responsible for opening up the tight junctions that join the

enterocytes, the cells that line the gut wall. The integrity of the gut wall is held together, in part, by these tight junctions.

Evolutionarily, the mechanisms of Zonulin and tight junctions come into play in conditions such as cholera and other similar illnesses. The effects of opening the tight junctions via the Zonulin pathway, allows water to fill the small intestine gut lumen. This water causes diarrhea and helps flush the system of toxins and harmful bacteria. The length and severity of the diarrhea may lead to severe dehydration and possibly death.

However, these small openings also allow small undigested food particles to leave the gut and pass into the systemic bloodstream. In the common literature, this phenomenon is called 'leaky gut'. After leaving the gut, they activate parts of the immune system, over a period of time, triggering inflammation. Since we often eat these inflammatory foods daily, after some time the inflammation causes disease state. This form of inflammation has been linked to many diseases that include insulin resistance and diabetes, dementia, cancer, arthritis, GI diseases, thyroid, soft tissue injuries and pain syndromes, excess weight, depression, reproductive health issues, and many more.

In the bigger picture, this form of inflammation and thus, chronic diseases, may be mitigated by (1) shutting down the production of Zonulin, (2) making the gut healthier to reduce the gut pathogenic pathways, (3) eliminating those foods that cross the gut during leaky gut scenarios triggering the inflammation cascade, and (4) introducing a variety of healthy choices and supplements to will lead to superior health and wellness. For example, the body can't heal if an individual isn't getting a high-quality sleep for an appropriate duration. The body can find itself in a condition known as oxidative stress. Oxidative stress is an unbalanced state between free radicals and antioxidants. The science involving oxidative stress is complex and fully addressed in the e-book that you will receive.

## What Causes Zonulin to be released?

It turns out that in addition to stress, toxins, heavy metals, and other pollutants trigger the release of zonulin. Since we are all exposed to relatively high levels of these stressors, it is not surprising that this mechanism is becoming more and more commonplace. Individuals who work with pollutants, heavy metals, insecticides, and other chemicals have much higher rates of these inflammatory diseases. Since everybody is different, one cannot always predict the levels of a given chemical as causing this inflammation.

## **The Researchers and Physicians Working in This Area have developed Effective Protocols for Reducing Inflammation**

It is important to recognize that returning your body back to health or to a younger biological age will take time as you didn't age or get sick overnight. It is also important that you will need to keep fighting to stay healthy as this is a life-long struggle. So, some of these protocols will need to be repeated periodically and some approaches will need to be used almost continuously. Every person is different and we will work to determine the frequency of the protocol usage.

These agents that include probiotics, omega-3 fatty acids (fish oil), vitamin D, and liver support herbs have all made their way into the medical lexicon in the past ten years. You can hardly avoid hearing about probiotics and fish oil from television advertisements.

We are making these protocols available to you should you decide to purchase these items. Our company ships them on a monthly basis to you. Our experience has shown that combining these protocols with avoiding inflammatory foods helps the results occur more quickly and more completely. We are available to discuss these with you.

## **Another Treatment Approach**

In the bigger picture of treating inflammation, one should address (1) intestinal permeability, (2) the balance between free radicals and anti-oxidants, and (3) liver support.

The intestines are the location where various toxins, that include certain food (technically not a toxin but there is 'intolerance' associated with some), enter the body and cause an attack on the immune system, which under chronic conditions leads to our primary defense system to become less effective and many believe that this scenario leads to many chronic illnesses.

You most likely have heard the terms 'free radicals' and anti-oxidants. Free radicals are produced in the body under normal metabolic conditions but the amounts of free radicals jump dramatically when the body has to deal with environmental toxins, inflammatory foods, stress,

and other triggers. Free radicals can cause significant damage if left unchecked as they will damage healthy organ tissues and the lining of blood vessels, a component involved in heart disease. As the amounts of free radicals increase, the balance shifts towards damage unless there is a corresponding increase in antioxidants. To this end, it is crucial to meet this demand.

The liver is the primary organ responsible for modifying toxins so that they may be excreted from the body via urine or stools. As we age, and through lifestyle choices, scientists and physicians know that the liver decreases the ability to do this important job, just when we need it the most. One doesn't have to be a heavy drinker or smoker to cause this decrease. It will happen anyway as we age but choices do have consequences. Therefore, it is also important to support the liver. Scientists and physicians now know that certain natural substances, such as certain herbs, will help achieve these goals. Medicine has no better substances than these natural compounds. Therefore, we strongly recommend various compounds to support the liver as we age.

We will be happy to make individual recommendations to you from our product list. All of our products are made from the highest quality ingredients and we feel this is a very important point. There are a great many quality levels available for use in the health industry. The lowest level products are often sold at the chain stores and by some internet companies. Physicians and other health providers generally use a higher grade of material, while some use the highest quality ingredients. We formulate our products using the absolute highest quality ingredients. We have done enough studies to know that there is a significant difference in health outcomes by using the best ingredients, and that's why most physicians and the top health companies also do so.