Alkalizing Foods that may help, other inflammatory food issues that may not.

TRP channel activators, Lectin, Oxalates, Retinoic Acid, Histamine.

J Depew, RD, 11/8/2021

Fennel seed is a more alkalizing food than many. In general green vegetables and seeds are alkalizing after digestion while animal and dairy products are more acid forming. The pH of the undigested food is not what is being measured. It is an acidity/alkalinity measurement of the ash, the waste chemicals that are produced during digestion, which are measured. Lime and lemon juice are acidic but their effect in digestion is alkalizing for the body.

 Lists of alkalizing foods and foods that have more of an acidic effect after digestion: http://www.alkalizingforlife.com/page/page/5128908.htm Excerpted below, with the lists reordered into food groups from alphabetical order.

A more acidic system may be associated with an increased risk for cancer as cancer cells prefer a more acid environment. During health our bodies are naturally slightly more alkaline than acidic. Inflammation is acid-producing - see Histamine Foods and other types of food sensitivities that can increase inflammation are included after the alkalizing food discussion, TRP channel activators and inflammatory bowel conditions, lectins, oxalates, and Retinoid Toxicity and chronic fatigue syndrome/Epstein Barr history.

Eat more of these groups, from the link:

Highly Alkalizing Foods

- Lemon, lime,
- Artichokes, arugula, asparagus, avocado, beet greens, beets, broccoli, cabbage, cabbage
 lettuce, carrots, cauliflower, celery, celery root, chard, chicory, chives, cilantro, collards, comfrey,
 cucumbers, dandelion greens, eggplant, endive, fennel, garlic, ginger, wheatgrass and its juice,
 barley grass, kamut grass, green beans, jicama, kohlrabi, leeks, lettuce, lima beans, lotus root,
 mustard greens, onions, parsley, peppers, pumpkin, radishes, rhubarb, rutabaga, sea salt, sea
 vegetables, seaweed, sorrel, spinach, sprouted beans-grains-seeds in all varieties, squash,
 sweet potatoes, taro root (dasheen in next section), tomatoes, tomatillos, turnips, wasabi,
 watercress, zucchini.
- Peas, soy beans, soy nuts,
- Baking soda, sea salt, soy lecithin.

Moderately Alkalizing Foods

- Raw Almonds (soak overnight for better digestibility, remove skins if oxalate sensitivity is a
 problem), brazil nuts (1-2 per day is a selenium serving, too many regularly may lead to excess
 selenium accumulating), hazelnuts (blanch and remove skins if oxalate sensitivity),
- Buckwheat groats, millet, burdock root,
- Caraway seeds, chia seeds, cumin/nigella seeds, dasheen, fennel seeds, flax seeds, hazelnuts, herbs, poppy seeds, pumpkin seeds, sesame seeds, sunflower seeds,
- Herbs, stevia, dasheen (dasheen is taro root boil and discard cooking water, high oxalate root vegetable is creamy and delicious as a mashed potato type dish), parsnip, radishes,
- Soy flour, tofu,
- Black seed oil, Borage oil, Flax seed oil.

Low Alkalizing Foods

- Apples, apricots, bananas, black currants, blueberries, cantaloupe, cherries, currants, dates, figs, gooseberries, grapes, grapefruit, kiwi, mandarin oranges, mangos, nectarines, oranges, papayas, peaches, pears, pineapples, plums, pomegranates, raspberries, red currants, rosehips, strawberries, tangerines, ugli fruit, watermelon. (Note: High sugar fruits are acidic in an imbalanced body and are best in season and for cleansing purposes in moderation. Fruit juice is not recommended)
- Amaranth, kamut, quinoa, rice(brown and basmati), spelt, teff, wild rice,
- Black-eyed peas, fava beans,
- Bragg liquid aminos™, miso,
- Vegetable broth, vegetables cooked, head lettuce, spices, string beans, wax beans, (yet green beans are in the High Alkalizing group?)
- Evening primrose oil, cold pressed oils, flax seed oil, marine lipids, olive oil, sunflower oil,
- Pecans, walnuts.

Neutral foods

Neutral Foods

Fresh coconut meat and water, ghee, xylitol.

- *Excess of anything can still be a problem.
- Water can kill if drunk in great excess rapidly, or chronically with low sodium intake. Hyponatremia
 is a risk, too little sodium in the blood. This is more likely to occur on a hot sweaty day when only
 water is available for thirst with no salty snacks available too.
- Coconut is healthy but as a saturated fat source is better eaten in moderation rather than a main oil or large servings.
- Ghee is still an oil, so is included as fat calories in a diet plan.
- Xylitol is a low calorie sweetener, generally well tolerated. Larger quantities may cause bloating and gassiness from microbial overgrowth. (healthline.com)

Fennel seed is available as a powdered spice. And pomegranate extract of some sort is also available in a capsule form. A capsule would be a small amount compared to a half cup serving of a liquid product but the capsule is dehydrated so it is more concentrated than a liquid juice product. The peel is very potent and a capsule of pomegranate peel extract may be healing.

- G13. Pomegranate, (effectivecare.info)
- G10. Nrf2 Promoting Foods, (effectivecare.info)
- Membranes & Inflammation, (<u>jenniferdepew.com</u>) has mucilaginous/water soluble fiber foods and hydrolyzable tannin foods, both groups are helpful for intestinal recovery during inflammatory bowel conditions.

Foods to eat less of, more acidity producing:

Low Acidic Foods

- Dried fruit, agave nectar, brown rice syrup, honey raw,
- Fresh water fish.
- Lentils.
- Olives.
- Rye bread, sprouted-grain bread and meal, whole grain bread and meal.

Moderately Acid Foods

- Cranberries, fructose, turbinado sugar, vanilla,
- Barley, granola, wheat, tapioca,
- Stored potatoes (~aged more)
- Beans, legumes,
- Carob, cashews, pistachios, stored potatoes,
- Soy sauce, tamari,

Highly Acidic Foods

- Alcohol of all kinds, cocoa, coffee and black tea, hops (used to make beer),
- Sugar: Barley malt sweetener, refined sugar, white sugar, artificial sweeteners, candy, jam, jelly, malt, soft drinks,
- Table salt(NaCl), MSG, many seasonings have an excitotoxin/glutamate aspect and salt also can lead to eating more than needed - addictive taste slightly, the MSG/glutamate type can be very addictive/habit forming because it has a stimulating effect.(4 Sneakily Addictive Everyday Substance, (renaissancerecoverycenter.com)
- Vinegar of all kinds, yeast,
- Butter, cheese, organic cheese, both raw milk and cow's milk that has been homogenized and pasteurized,

- Chicken, turkey, game birds, eggs, pork, bacon, sausages, veal,
- Crab, lobster, ocean fish, shrimp,
- Bread-white bread, biscuits, cookies, cakes, corn, corn meal, oatmeal, oats, pasta, pastries, rice,
- Mushrooms.
- Cottonseed oil, refined oils, fried foods of all kinds, hydrogenated oil, margarine,
- Ice cream, milk chocolate, processed foods, pudding, processed foods of all kinds. *The
 combination of fats and sugar creates exorphins morphine like, potentially beneficial in smaller
 amounts but the deliciousness and rush may lead to binge eating or addictive focus on those
 foods over a more healthy variety.

Some of the foods on the Acidity producing lists are healthier than others.

Moderation! and high quality!

Trying to have more alkalizing foods and fewer acidity producing ones is a good start and reasonable. Diets include variety. The modern diet too often includes mostly foods from the *Highly Acidic Food* list.

Food Sensitivity, TRP activators, Lectins, Oxalates

Personally inflaming - is still inflammatory - for you the individual.

Any food or seasoning that is personally irritating will add to inflammation and increase acidity within the body. If you always feel congested after eating a certain food, or prickly tongue, or other allergy symptoms besides a watery nasal discharge, then it is likely some sort of food sensitivity. There can be different reasons. Some genetic even, an enzyme is missing and a food others can eat cause problems instead because something isn't being digested adequately.

TRP channels, IBS, Inflammatory Bowel Syndrome, or Migraines.

Other food related symptoms are temporary but can become more severe and intolerable after a stress event or chronic stress. Hot pepper will cause TRP channel activation and lead to increased saliva production and may cause a watery runny nose also, and maybe a temporary warmth and reddening of the skin. In sufferers of Irritable Bowel Syndrome (IBS) it and other TRP channel activators can cause an immediate trip to the bathroom. Horseradish, ginger, turmeric, cinnamon, cloves, mint, nutmeg, and black pepper are all TRP channel activators strong enough to cause symptoms for someone with inflammatory or irritable bowel syndrome.

 Migraines may also be caused by TRP channel activators. The onset would likely be more delayed, 6-12 hours after eating the food or being exposed to mold perhaps. Eliminate the suspected food, as an ingredient also, for a week or more, and see if your overall health improves. If trying the food again causes a symptom to flare up again, then exclude it from your diet - it is inflammatory for you.

Lectin

Lectin is a glycoprotein that can cause clumping of cells. This type of sensitivity is not going to be the same as 'allergy testing' for a food allergy like for peanuts. Food sensitivity can have to do with food lectins, unique protein shapes, that interact like an allergen/foreign protein with our immune antibodies or other proteins and clumping can occur as clusters of protein and cells are formed.

Congestion is clumping - excess proteins for the amount of fluid that is present. That is not quite the way it works but may help associate a stuffy nose with foods to avoid - even if you love them.

How Lectin sensitivity occurs, and the symptoms that may be present:

 Genes, Symptoms & Blood Tests to Detect Lectin Sensitivity (selfhack.com) by Joe Cohen, BS | Reviewed by Nattha Wannissorn, PhD (Molecular Genetics) | Last updated: April 7, 2021

6 Foods That Are High in Lectins, (healthline.com) by Alexandra Rowles, RD on August 26, 2019 -

- Red kidney beans, especially if undercooked or raw, (any beans are high in lectins, red kidney beans and a few other types have more than others)
- Soy beans, better if fermented or boiled for at least ten minutes,
- Wheat / gluten
- Peanuts
- Tomatoes (Nightshade family)
- Potatoes (Nightshade family)

"Most canned beans have not been soaked or cooked properly to reduce lectins."

*so it would be helpful to cook them more, if they seem underdone. Boil for ten minutes.

[&]quot;Proper soaking and cooking, as well as choosing some of the **lower lectin options like Great Northern beans, green beans and lentils**, can make these a reasonable option when used sparingly."

What Foods Contain Lectins: and What to Do About It, by Nancy Mehlert, MS (woodlandswellnessmd.com)



Oxalates

When adding more 'healthy' foods to the diet, like beans, nuts, greens, and other fiber rich plant foods, or teas, a person may find themselves sensitive to oxalate crystal formation. The oxalate chemical is found in foods, the skin of almonds or hazelnuts, or in beans and taro root, and in green or black tea. It combines with calcium in the body, if not broken down, and forms a crystalline, needle like shape, which can collect in tissue. The binding with calcium may increase risk of calcium deficiency or osteoporosis. Within the digestive tract, or when in the bladder, excess oxalates feels like crystals. It can be painful in a prickly stabbing physical way, that is unlike other pain.

Great Northern Beans and tofu were mildest for me when I was experiencing inflammatory bowel symptoms for the first time, and had to find something I could eat without pain and be able to retain it long enough to absorb some nutrients. Many of my typical foods were causing problems, including coffee, and pain. Restricting or avoiding the problem foods or beverages is the solution along with having adequate calcium. This is not a problem for all people equally, some break down the oxalate better than others however switching to almond milk and almond meal keto products, increasing beans, kale and chard, and other nuts, along with coffee or tea, chocolate, can add up to too much of an oxalate load for most anyone. Portion size matters for breaking it down, less is more likely to be efficiently metabolized.

Retinoic Acid - deficiency - AIDS like; or Retinoid Toxicity

Vitamin A deficiency affects immune function and can increase risk of more severe and deadly measles risks. Vitamin A is found in animal products and carotenoids are found in orange/red/deep green produce.

Retinoid toxicity may also be a problem. Following Epstein Barr viral infection Chronic Fatigue Syndrome symptoms may be due to a change in the liver that leaves the body forever after over-activating vitamin A or carotenoids into the active Retinoic Acid form. Retinoic Acid is also used in some skin treatment medications and information about Retinoid Toxicity has been about those cases. Stopping the medication is the treatment.

If the liver is over-activating vitamin A and carotenoids, then the solution is to stop eating foods containing rich sources of the carotenoids or vitamin A. More info here: <u>Retinoid Toxicity</u> https://docs.google.com/document/d/1vmLyBzx_jol2sT83YUfnWAKrZVd6UTXZhfUDZw-RoA8/edit?usp=sharing

Histamine

Histamine sensitivity can be due to a lack of the methylated, active form, of folate. When there are genetic differences or malfunction the folic acid form may not be helpful to the body. It may even add to a lack of the active methyl folate form finding the chemical reactions where it is needed because the spot is being filled by an inactive folic acid form. Green peas or black-eyed peas, asparagus, orange juice with the pulp, are all very good sources of methyl folate. Whole grains, beans, nuts and seeds tend to be good sources.

Other foods can be a source of histamine or lead to histamine production within our digestive tract. Avoiding the worst sources can be very helpful to physical and mental health. Histamine is a modulator within the brain and in normal amounts helps us stay balanced. In excess it causes hyperexcitability of whatever mood may be present - mania with grandiose thinking, or severe fear and anxiety, may be constant thoughts leading to reckless behavior, or what seems to be angry or scared outbursts. Calming down in an unstimulating environment is needed. It is an irrational meltdown rather than an angry outburst. Not remembering full details of the hyper-excited episode may be typical as so much brain activity is occurring that memory formation doesn't have time to occur.

If histamine excess remains undiagnosed and the meltdowns continue regularly, daily, then brain damage is likely occurring also - within the hippocampus in particular. Later stages of the symptoms may be diagnosed as schizophrenia or Alzheimer's dementia and the patient may

never be provided a low histamine diet and extra methyl folate supplements or the enzyme which helps breakdown histamine (some people may genetically or for other reasons not be making the enzyme).

See <u>Histamine Food Lists</u> for more details.

Links to this and other documents:

This document is focused on reducing inflammation by learning what specific foods your body may be more comfortable with vs reacting negatively to the food or its digestive breakdown products. Alkaline Foods:

https://docs.google.com/document/d/19_z8AJX7Qz8Lv_LMrA0rYjFrRtGx3mt_PlxTc4xBMwU/editelestation to the complete the complete to the complete the comp

also Histamine Foods:

https://docs.google.com/document/d/17iz9lsJyGqIUUjF0p-totXp4R2GhgRi2Na4gYueisTM/edit?usp=sharing

Regarding the negative health effects of EMF, radiation, or radio waves: Symptoms of EMF / radiation / radio waves:

<u>Nutrients We Need Them All</u>, post with the presentation Solutions for Chimeric Protein.

Protocol Collation & Therapy Goals:

https://docs.google.com/document/d/1RmdgbxBUuJa9nFUmCfSoZdnEB8EPc181WOvhGakAK TU/edit?usp=sharing

Protocol Basics - graphics:

Prevention Basics

- Zinc, 25-50* mg, *older adults
- Zinc ionophore: quercetin 500 mg or 1 teaspoon citrus peel; EGCG 200 mg - 2-3 cups green tea, 1/4 tsp inner pomegranate peel; Black seed oil, 1 tsp.
- Vit. D3, 1000-2000 IU & sunshine
- Vit. C, 100 mg 1000 mg buffered
- Vit. K2, 200 mcg 45 mg
- Magnesium glycinate 400 mg, or Mg sulfate - Epsom salt soaks, 1 cup ~ 20-40 minute soak 1-2/wk.
- Copper, 2 mg / Trace Mineral mixed supplement / Methyl B complex or one-aday.

J R Depew, RD 2022

Food has antivirals.

Good food sources of zinc include:

 oysters, meats, poultry, dairy, cashews, pumpkin seeds. Other beans, nuts and seeds are also vegan sources. Meats have more zinc than vegan sources, while oysters have so much zinc that it might risk excess, if eaten regularly in large servings.

Good food sources of quercetin include:

 red onion, onion, garlic, kale, tomatoes, asparagus, broccoli, capers, nuts and seeds, red grapes, cherries, olive oil. Herbal supplements also containing quercetin include St John's Wort, Gingko biloba, and American Elder.

Good sources of vitamin C include:

 cabbage, tomatoes, green peppers, broccoli, asparagus, peas, kale, sprouts, & citrus, strawberries, kiwi, papayas, cantaloupe.

Food & sunshine have antivirals

Good food sources of vitamin D3 include:

 cod liver oil, fatty fish - salmon, tuna, mackeral; beef liver, small amount in egg yolk, and mushrooms.

We make vitamin D with sunshine or UV containing light - unless glyphosate residue is interfering from within protein structures that were intended to be enzymes for vitamin D metabolism.

Fortified dairy sources and one-a-day supplements use vitamin D2. The problem: it would not be as bioactive as a vitamin D3 supplement or food, if there is a glyphosate effect causing malfunctioning enzymes.

Bonus: Sunshine helps immune function by helping us make water soluble forms of vitamin D & A; and helps circadian cycle function - anti-aging & anti-inflammatory.

J R Depew RD 2022

Glyphosate

Glyphosate depletes minerals & needs nutrients to be removed. Eat organic foods & animal products to reduce intake. Supplements may help replace missing nutrients and others may help clear glyphosate residue.

- Depleted: Manganese (2 mg), magnesium (400 mg elemental or Mg sulfate soaks); amino acid: Dimethylglycine (2.5-10 gr/day), CoQ10 (200 mg).
- Cysteine or NAC (600 mg) and taurine (1000 mg) are also amino acids that might help clear cellular debris such as malformed proteins. Liposomal glutathione and/or Nrf2 promoting foods/nutrients.
- Methyl B12 (500-1000 mcg; folate (400 mcg -1 mg); and the methyl donor choline (250 mg).
- Curcumin (200-500 mg), garlic/sulfur containing produce, vit C (100-1000 mg), alpha lipoic acid (200 mg), and SODs.

How-to's and cautions

Niacin flush, high dose & methyl Bs & other cofactors

- How-To: Gradual start is best, 25-250 mg as a starting point. Take weeks to months to increase to 500 > 750 > 1000 mg dose, then increase to twice a day, early better than bedtime. Alert effect.
- Buy: Niacin or nicotinic acid, "Flush", but avoid Extended Release, or "No Flush," and nicotinamide is a slightly different form and is not flush niacin.
- Caution: Niacin is acidic, megadose of vitamin C in addition, or other acidic supplements or foods, may lead to excess acidity. A little baking soda in water may prevent pH problems. Adequate calcium helps prevent gout risk. Total no more than 3000 mg/day of niacin to reduce risk of gout. Serotonin excess in short term can be a risk, & additive effect with sudden increase in dose or addition of SSRI meds.

Melatonin, w/w-out Niacin

- Melatonin is a hormone made at night in the pineal gland and our mitochondria.
- Circadian cycle refers to melatonin production and many other gene functions that occur either in the sleep/dark hours or the wake/light hours. Best when our body is in complete darkness. Eyemask/soft cloth draped over the eyes can help when complete darkness is not possible. Cover alarm clock lights, etc.
- Supplements have shown anti-viral function, 6-10 mg at night for an adult. Higher doses (divided in a few smaller amounts) can be used during the day and may help with infection. Bulk powder would be needed.
- Take melatonin 15 minutes prior to a high dose niacin (better with a meal) & the flush effect may be reduced.
- Pistachio nuts and tart cherries are a natural food source.
 J R Depew, RD, 2/2022

Disclaimer: Opinions are my own and the information is provided for educational purposes within the guidelines of fair use. While I am a Registered Dietitian this information is not intended to provide individual health guidance. Please see a health professional for individual health care purposes.

My Master Reference List has dosing basics for many nutrients, minerals, cofactors, and more info about iron chelators and other phytonutrients - work in progress.

https://docs.google.com/document/d/1LhU0KFIJqegzgV5Vd-MIPctLXD0HysON-vbNsTAUX8E/e dit?usp=sharing