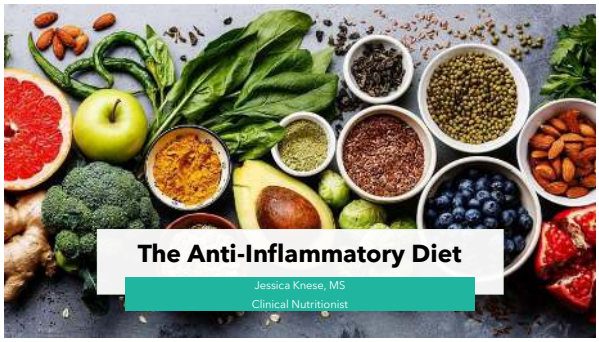
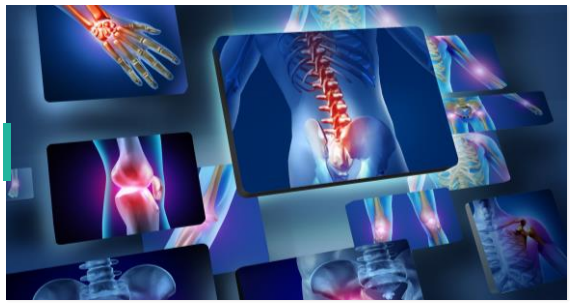


1

What is Inflammation?

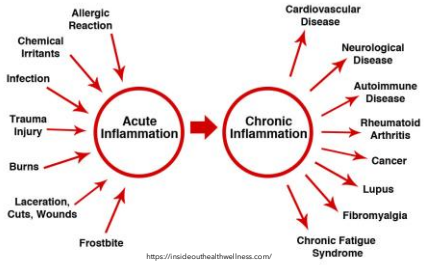
- Acute inflammation is a normal and healthy response from the immune system
  - Chronic inflammation results in tissue and organ destruction, chronic disease, and chronic pain.
- Think of inflammation like a **fire**
  - Low-grade chronic inflammation can contribute to many chronic health problems and can itself become a disease
  - Destroys healthy cells in arteries, organs, joints, and other parts of the body.

2



3

Acute Vs. Chronic Inflammation



4

What is the Problem with Inflammation?

- It is much harder to identify and resolve
  - The longer the low-grade inflammation persists, the more damage
  - The body's process of reducing inflammation usually causes cell damage as some healthy cells get caught in the cross-fire
- **Bottom line:** The body's normal, physiological response to injury is acute inflammation. **However, if the problem isn't resolved or your immune system is compromised, it can become chronic**

5

What Causes Inflammation?

- **Environmental toxins**
- **Exposure to mold in your home, office, or food**
- **Food that irritates your immune system**
- **Stress (both physical and emotional)**
- **Pesticides in fruits and vegetables**

6

7

Inflammation can Lead to…

Alzheimer's disease- diabetes type 3
Asthma
Cancer
Chronic obstructive lung diseases
Chronic pain
Type 2 diabetes
Heart disease
Inflammatory bowel disease
Stroke
Autoimmune conditions

8

Symptoms of Chronic Inflammation

- GI issues
- Chronic fatigue
- Depression and anxiety
- Cravings
- Insulin resistance/blood sugar issues
- Skin issues
- Weight gain
- Headaches
- Allergies

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Inflammation and Diabetes

- In a study conducted in 2014, researchers found that without inflammation, glucose couldn't enter and damage cells in the body. **This highlights the significance of an inflammatory role in diabetes.**
- Researchers noted that adding an inflammatory protein called "interleukin-1" into the bloodstream results in metabolism of excess → inflammation production.
- ***This means that reducing inflammation through anti-inflammatory foods could dramatically protect against blood sugar dysregulation and diabetes complications***
  - University of Kentucky. "What drives inflammation in type 2 diabetes? Not glucose, says new research." ScienceDaily. ScienceDaily, 21 August 2019. <www.sciencedaily.com/releases/2019/08/190821082238.htm>.

10

C-Reactive Protein

- High levels of C-reactive protein (HS-CRP), an important marker for inflammation, are associated with several chronic illnesses, esp atherosclerosis
- Studies have determined that "people whose CRP levels rank in the top are twice as likely to have a heart attack as those with CRPs in the lowest third"
  - https://www.health.harvard.edu/newsletter_article/Inflammation_A_unifying_theory_of_disease

12

Anti-Inflammatory Diet

- Similar foundation to Mediterranean and Paleo Diets
- "People that more closely eat a Mediterranean-like diet have consistently lower levels of inflammation compared to other less healthy ways of eating."
- Protective against many chronic health conditions including **cardiovascular disease, type 2 diabetes mellitus, Parkinson's and Alzheimer's disease, and some cancers**.
  - 1. Willett WC. The Mediterranean diet: science and practice. *Public health nutrition*. 2006;9(1a):105-110.

60% of chronic diseases **could be prevented by a healthy diet** [1]

14

Anti-inflammatory Diet cont.

- Supports the body by providing the proper vitamins and minerals, essential fatty acids, dietary fiber, antioxidants and phytonutrients that it needs to function properly

- Stabilizes blood sugar

15

17

Sugar

- A study conducted by the Journal of Clinical Nutrition found that sugar and soda consumption is consistently associated with an **increased risk of several chronic inflammatory diseases** such as Type 2 diabetes, rheumatoid arthritis, and other cardiovascular diseases
  - Hu et al. Sugar-sweetened soda consumption and risk of developing rheumatoid arthritis in women. Volume 100, Issue 3, September 2014, Pages 959–967.

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Blood Sugar and Inflammation

- When blood sugar is high, the body produces more free radicals that trigger the immune system
- This damages cells and causes inflammation in the blood vessels→ diabetic complications
- Alters the hormone insulin, which is responsible for fat storage
  - Increase in insulin = inflammation

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Sugar and Gut Health

- In our body, **70% of our immune system resides in our gut**. We have trillions of bacteria and fungi in our gut, which is also known as our "gut microbiome"
- Having healthy gut bacteria is so important to maintain our health and cognitive function that our gut is often referred to as our "**second brain"** or the gut-brain axis

20

Bacteria Imbalances

- Sugar is the #1 food source for bad microbes in the gut and promotes the growth of their self-protective coating, which is called a biofilm
- The more sugar you consume, the more you feed the bad microbes in your body. This can lead to bacteria imbalances and gut dysfunction, which can trigger immune attacks on our organs, joints, and tissues

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What Type of Sugar Should Clients Eliminate?

- **Many packaged and processed foods contain added sugars and sodium, as well as preservatives and other chemicals. Examples include:**
  - Canned soups
  - Cereals
  - Frozen dinners
  - Lunch meats such as turkey and ham
  - Pre-made sauces such as pasta sauce and gravy
  - Dressings and condiments such as balsamic vinaigrette and ketchup

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Packaged Foods

- When buying sliced deli meats, make sure that the label includes "nitrite and nitrate free" -which are preservatives- and don't contain any added antibiotics and hormones
- When reading condiments and other labels, avoid any products with high fructose corn syrup and any chemical names you cannot pronounce

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Artificial Sweeteners

- Focus on eliminating foods with added sugars, sweets, sodas and diet sodas, alcohol, juices, high fructose corn syrup, baked goods and pastries, artificial maple syrup, artificial sweeteners (e.g. Splenda, aspartame, sucralose), etc.
- **Sugar-free foods and artificial sweeteners cause imbalances in our healthy gut bacteria, leading to inflammation, digestive issues, autoimmunity, brain fog, migraines, etc**. Artificial sweeteners also disrupt our body's satiety sensors and hormones, so your brain cannot tell you when you're full, which overtime can lead to weight gain

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Sugar Alcohols

- **What about sugar alcohols?**
  - Sugar alcohols, such as xylitol and mannitol, are low-calorie, natural sweeteners. Although they are much safer than artificial sweeteners, there are still some concerns surrounding these. Sugar alcohols are often made from GMO ingredients, like corn products. When taken in larger amounts, they can also cause some GI upset or laxative-type effects. They also do not provide any nutrients, unlike raw honey or coconut sugar. **When consuming sugar alcohols, do so moderately**

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Healthy Sweeteners

- **Pure maple syrup**
- **Raw honey**
- **Coconut sugar**
- **Stevia**
- **Monk fruit**
  - These natural sugar alternatives are high in vitamins and other nutrients and do not cause as drastic of a blood sugar spike and crash as other processed sugars. Use these sweeteners in coffee or tea, oatmeal, baked goods, etc. Since honey and maple syrup are still high in natural sugar, make sure to consume no more than 1 tsp. per day.

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Healthy Additions

We recommend these products from the following brands:

- **Primal Kitchen and Tessamae's** brand BBQ sauce, steak sauce, salad dressings, mayo, etc.
  - Go to the Primal Kitchen or Tessamae's website to locate the store nearest you
- "**Everything but the Bagel**" spice adds flavor to many dishes
  - Add this to salads, avocados, cucumber slices, and eggs to add flavor to any dish
- **Nutritional yeast** adds a cheesy flavor and supplies B vitamins
- Kind, Autumn's Gold, and Thunderbird nut bars
- **Simple Mills** GF bread, muffins, or crackers
- Evolved brand chocolate bars, Keto Cups, and Trail Mix
- **Hope** brand hummus and dips

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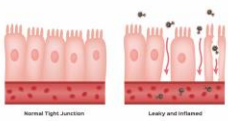
Gluten

- A study done by the Journal of Nutritional Biochemistry found that **a gluten-free diet resulted in a decrease in inflammation and insulin resistance**.
- Research suggests a gluten-free diet should be used to prevent obesity and metabolic disorders such as Type 2 diabetes.
  - Soares et al. (2013). Gluten-free diet reduces adiposity, inflammation and insulin resistance associated with the induction of PPAR-alpha and PPAR-gamma expression. The Journal of nutritional biochemistry, 24(6), 1105-1111.

29

Gluten and Gut Health

- **Gluten can cause intestinal damage and a leaky gut**
  - A leaky gut occurs when inflammatory foods and foods that we are sensitive to increase the permeability in our intestinal wall and allow particles to get into our blood stream.
  - This exacerbates symptoms associated with inflammation, as well as decreases the absorption of nutrients that our bodies need to function.



https://www.monashfodmap.com/blog/gut-permeability-ibs-do-i-really-have-leaky-gut/

30

Gluten and Autoimmunity

- **Both gluten and milk proteins (casein) have been found to be a possible trigger for autoimmune conditions in susceptible people.**
  - According to Fasano and colleagues, autoimmune responses can be triggered against gluten and other molecules that should not be in the gut or blood stream, resulting in a "**fury of cytokines, immune cells, and inflammation**".
    - Fasano. (2011) Zonulin and its regulation of intestinal barrier function: the biological door to inflammation, autoimmunity, and cancer. Physiol. Rev., 91(1), 151-75. PMID: 21248165.

32

Molecular Mimicry

- **More and more studies are looking at "molecular mimicry" as the possible cause for this link between gluten and autoimmunity**. Molecular mimicry basically means that the molecules look similar, so your immune system cannot differentiate between gluten and a part of your body, such as your thyroid.
- According to Alternative Therapies in Health and Medicine, "this similarity can result in cross-reactivity that leads to food autoimmunity and even autoimmune disorders, such as multiple sclerosis (MS), celiac disease (CD), and neuromyelitis optica".
  - Other autoimmune conditions that can be linked to molecular mimicry are Hashimoto's Thyroiditis and rheumatoid arthritis.
    - Vojdani, Aristo. (2015). Molecular mimicry as a mechanism for food immune reactivities and autoimmunity. Alternative therapies in health and medicine. 21. 34-45.

33

http://www.nutritionqed.com/blog/2015/07/autoimmune-diseases-and-nutrition/

34

What is Gluten?

- Gluten is a protein found in **wheat and other wheat varieties** and products
  - Wheat products are also known as durum (typically found in pasta and macaroni products), and other grains and cereals such as kamut, farro, spelt, and bulgar.
  - **Also avoid barley, rye, and triticale** (wheat and rye hybrid). Make sure to buy oats certified gluten-free as they are often cross-contaminated with other wheat products
  - Beer, soy sauces, dressings, spices, pastas, bread
    - Make sure to always read the labels and buy gluten-free whenever possible

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Gluten-free Options

- Amaranth
- Arrowroot
- Buckwheat
- Chia and flax seeds
- Millet
- Nut flours (coconut, almond)
- Gluten-free oats
- Quinoa
- Tapioca
- Cassava

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Gluten-free Brands

- Birch Benders paleo pancake mix
- Franz bread
- Simple Mills
- Bob's Red Mill
- Udi's
- Banza pasta

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Dairy and Inflammation

- According to Center for Nutrition Studies, **there is a strong correlation between high dairy consumption, molecular mimicry and autoimmune diseases**, specifically MS and type 1 diabetes (1).
- Studies in patients with arthritis show a reduction in inflammation and pain when dairy products are removed from their diet.
  - This includes all types of animal milk, cheese, cream, sour cream, milk creamers, whey, yogurt, ice cream, etc.

- Dahl-Jorgensen K, Joner G, Hanssen KF. Relationship between cows' milk consumption and incidence of IDDM in childhood. Diabetes Care 1991;14:1081-3.

39

Casein

- Dairy contains casein, which is a protein that has a similar structure to gluten
- 50% of people who are gluten intolerant are usually intolerant to the casein protein as well
- Contains a sugar called lactose that many people cannot properly digest due to their lack of an enzyme called lactase. However, those with sensitivities may not always just experience digestive issues. Other symptoms may include:
  - Migraines
  - Brain fog
  - Skin issues such as acne, psoriasis, or eczema
  - Chronic joint pain and inflammation
  - Behavior disorders, such as autism

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Hormones in Dairy

- Many cows are fed inflammatory grains, hormones, and antibiotics
  - This leads to inflammation, gut microbiome issues, and may increase your risk of cancer due to high estrogen levels and other hormone imbalances
  - Studies have found that the "**presence of steroid hormones in dairy products could be counted as an important risk factor for various cancers in humans**".
    - Malekinejad H, Rezabakhsh A. Hormones in Dairy Foods and Their Impact on Public Health - A Narrative Review Article. Iran J Public Health. 2015;44(6):742-758.

41

Acid-Forming

- Milk is an acid-forming food due to the lactic acid in it, so our bodies might actually need to ***pull out*** calcium and other important minerals from our bones and blood in order to balance our body's pH.

- The Journal of Nutrition in 2015 found that **eating dairy foods increased low-grade inflammation** and a study of more than 38,000 people found that increasing "dairy product consumption was associated with an increased risk of total hip arthroplasty [reconstruction] for men with OA..."
  - Hussain SM, Cicuttini FM, Giles GG, Graves SE, Wluka AE, Wang Y. Association between Dairy Product Consumption and Incidence of Total Hip Arthroplasty for Osteoarthritis. *J Rheumatol*. 2017;44(7):1066-1070. doi:10.3899/jrheum.161395

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Non-dairy Sources of Calcium

Many people consume dairy for the calcium in it, but there are much less inflammatory food choices to get your daily calcium intake

- Almonds and seeds (especially sesame seeds)
- Cooked dark leafy greens such as kale and spinach
- Organic, non-GMO or sprouted tofu
- Canned sardines and salmon (BPA-free cans)

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Dairy Alternatives

- Almond milk, coconut milk, cashew milk, oat milk, hemp milk, cashew or almond yogurt, kefir, organic ghee, and fermented yogurts, raw/organic cheeses, and goat's or sheep's dairy in small amounts
  - Kitehill yogurt and cheeses
  - Siete queso dip
  - Miyoko's cheese
  - Treeline treenut cheese
  - Homemade cashew "parmesan" cheese
  - Nutritional yeast provides a cheesy flavor as well as B vitamins

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- "Trans fat consumption is known to influence multiple risk factors besides changes in lipids, including **increased systemic inflammation, increased thrombogenesis (blood clots) and reduced endothelial function**, all of which (in combination or individually) contribute to increased cardiovascular risk."
  - Iwata et al. Trans fatty acids induce vascular inflammation and reduce vascular nitric oxide production in endothelial cells. PLoS One. 2011;6(12):e29600. doi:10.1371/journal.pone.0029600

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Trans Fats

- Most unhealthy fats consist of trans fats and partially hydrogenated oils.
  - Created through a chemical process in order to make vegetable oils solid at room temperature
- **Trans fats lower good cholesterol and increase bad cholesterol, leading to inflammation and risk of CVD.**
  - Fried foods, shortening, fast food, margarine, vegetable oils (such as canola and sunflower) and microwave popcorn.

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Inflammatory Oils

- Oils that contain inflammatory omega-6 fats include corn oil, safflower oil, canola oil, sunflower oil, and other vegetable oils
- **These oils are processed with detergents and chemicals that make them extremely inflammatory and carcinogenic (cancer-causing)**
- Typically used in restaurants and found in processed foods like potato chips, hummus, roasted nuts, etc.

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Omega 3 Benefits

- Other benefits of healthy Omega-3 fats are:
  - Improved energy and brain functioning
  - Absorption of fat-soluble vitamins such as vitamin D and vitamin A
  - Decreased inflammation, leading to less pain and risk of chronic health conditions
  - Healthy heart and cholesterol levels

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Omegas

- **Omega-3s and omega-6s should be consumed at an anti-inflammatory ratio of 1:1** or higher
  - Many Americans are consuming upwards of twenty times more omega-6s than omega-3s, leading to inflammation and health risks.
- Omega-6 fatty acids are essential to consume for several body processes, but because they promote an inflammatory state, it is necessary to decrease the amount you consume, and incorporate more Omega-3 healthy fats

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Healthy Fats

- Grass fed animal protein and pasture-raised eggs
- Grass fed beef and chicken was found to have 60% more omega-3's than grain-fed meats
- Raw nuts such as walnuts, pecans, and almonds
  - Avoid peanuts as they are high in inflammatory omega-6s and molds
  - Just two Brazil nuts a day provides selenium for healthy thyroid functioning

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Healthy Fats cont.

- Avocados
- Organic ghee
- Fish oil
- Organic, cold-pressed olive, coconut, and avocado oil
- MCT oil- a more concentrated, liquid form of caprylic acid, which is a potent antimicrobial and energy booster, made from coconut oil

- **Note:** Olive oil has a low smoke-point oil, so make sure to only use it for dressings and low-heat cooking
- **What is ghee?**
  - Ghee is made from organic butter, but has been clarified so that it doesn't have the milk solids and sugar that dairy has

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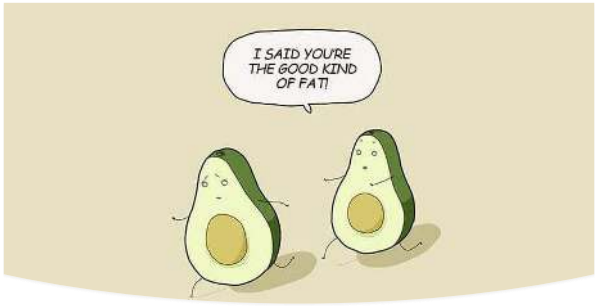

55

Mindful Eating

- Smelling and preparing food gets the body ready for digestion
  - Saliva, stomach acid
- Adequately chewing food aids in digestion and makes nutrients more available
- If food is not digested properly, it can enter the blood stream and act as a foreign invader

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- "The practice of mindfulness has helped thousands of people to live more intentionally and develop the skills necessary to **manage chronic pain, disease, depression, sleeping problems, and anxiety**."1

57

Mindful Eating cont.

- Decreases fatigue and leads to better satiety sensors and relationship with food
- Mindless eating elicits stress hormones and disrupts our body's digestive abilities
  - Can lead to inflammation and weight gain

Nelson JB. Mindful Eating: The Art of Presence While You Eat. *Diabetes Spectr*. 2017;30(3):171-174. doi:10.2337/ds17-0015

58

Anti-inflammatory Spices

- Chili Pepper (capsaicin)- analgesic and anti-inflammatory properties
- Cinnamon- blood sugar regulation
- Cloves
- Garlic- anti-oxidative, limits the effects of pro-inflammatory cytokines
- Rosemary
- Turmeric (curcumin)- consume with black pepper

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Detoxifying Foods

- Detoxifying foods help support your liver's ability to detox and help pull out heavy metals and other toxins, decreasing the stress and inflammation on your body
  - Garlic
  - Celery
  - Turmeric
  - Ginger
  - Beets
  - Chlorella/spirulina
  - Green tea
  - Herbs such as parsley and dandelion, milk thistle
  - Cruciferous veggies such as Brussels sprouts and cauliflower

60

Vitamin D

- An optimal level of vitamin D has been show to prevent the onset and/or exacerbation of several autoimmune diseases
  - Inflammatory bowel disease (IBD), psoriasis, rheumatoid arthritis, lupus and Hashimoto's thyroiditis.
- Vitamin D has been repeatedly proven to be a necessary part of a healthy immune response
- NIH recommends 600 IU, but may need more in cloudy climates

- Aranow C. Vitamin D and the immune system. *J Investig Med.* 2011;59(6):881-886. doi:10.2310/JIM.0b013e3182 1b8755
- Liu W, Zhang L, Xu HJ, et al. The Anti-Inflammatory Effects of Vitamin D in Tumorigenesis. *Int J Mol Sci.* 2018;19(9):2736. Published 2018 Sep 13. doi:10.3390/ijms19092736

61

Magnesium

- "Magnesium deficiency is a significant contributor to chronic low-grade inflammation that is a risk factor for a variety of pathological conditions such as cardiovascular disease, hypertension, and diabetes."1
- Under-consumed in the US due to poor diet- 60% of Americans do not get enough.
  - **Dark leafy greens, legumes, nuts, seeds, and whole grains**
  - (RDA) 320 mg/d women and 420 mg/d for men over 31 y.o
  - One cup of spinach/Swiss chard:150 mg; 1⁄4 cup pumpkin seeds:190 mg; 1 cup of black beans, 3⁄4 cup quinoa, and 1⁄4 cup cashews/sunflower seeds: 120 mg.

- 1. Nielsen FH. Magnesium deficiency and increased inflammation: current perspectives. *J Inflamm Res.* 2018;11:25-34. Published 2018 Jan 18. doi:10.2147/JIR.S136742

62

Nightshades

- Many people have an inflammatory response to nightshades because the skins contain lectins which can disrupt digestion and interfere with nutrient absorption
- "Lectins resist degradation by gut enzymes. They bypass the cell wall barriers and can then bind various tissues. **Lectins have been found to irritate the immune system** and produce symptoms of food hypersensitivity in allergenic and non-allergenic patients."

- Pramod, S. N., Venkatesh, Y. P., & Mahesh, P. A. (2007). Potato lectin activates basophils and mast cells of atopic subjects by its interaction with core chitobiose of cell-bound non-specific immunoglobulin E. *Clinical & Experimental Immunology*, 148(3), 397–407.

63

White Potatoes

- **White potatoes have one of the highest glycemic index scores,** which leads to blood sugar spikes and crashes. They are simple carbohydrates, which immediately turn into sugar in the body.
- Potatoes also contain saponins, which are what creates a "soap-like" foam
  - Found to cause intestinal permeability, leading to inflammation which is, "most particularly in people with diseases of chronic inflammation (cancer, autoimmune disease, cardiovascular disease and diseases of insulin resistance)."
  - Cani PD, Amar J, Iglesias MA, Poggi M, Knauf C, Bastelica D et al. Metabolic endotoxemia initiates obesity and insulin resistance. Diabetes. 2007 Jul;56(7):1761-72.

64

Eliminating Nightshades

- **The most commonly consumed nightshades are white potatoes, tomatoes, peppers, eggplants, and some spices such as paprika**
- Eliminate them from your diet for six weeks, re-introducing one by one for three days at a time
- When reintroducing, be aware of any type of symptoms you may be experiencing such as:
  - Pain
  - Inflammation, especially in the joints
  - Headaches
  - Fatigue
  - GI discomfort

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Nightshade Alternatives

- Roasted or steamed cruciferous vegetables such as **cauliflower, brussels sprouts, or broccoli**
  - These are helpful in detoxifying excess hormones (DIM) and contain Chlorophyll which helps support liver detox.
- Cooked dark leafy greens such as **spinach or kale** in an omelet, smoothie, or salad.
  - Cooking leafy greens helps break down certain proteins in order to make them easier for our bodies to digest.
  - If you are having a salad with leafy greens, massage the leaves with olive oil to break down proteins as well

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Nightshade Alternatives

- White potatoes → sweet potatoes, beets, parsnips, turnips, or any other root vegetables.
- Cucumbers, radishes, carrots, or jicama for a snack with hummus or dressing.
- In place of pasta sauce, you can use Primal Kitchen dairy free alfredo sauce or pesto. You can also top your pasta with organic ghee or olive oil in place of butter and throw some mushrooms, Italian seasoning, and red onions on top
- ***Note: Banza brand makes a great noodle alternative**

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Anti-Nutrients

- Phytic acids, lectins and enzyme inhibitors
- Phytic acid (phytates) – storage form of phosphorus
  - Defense mechanism
  - Found in seeds, nuts, beans, grains
  - Binds minerals in the GI tract, making them less available to our bodies
- Eating too many grains leads to less absorption of nutrients from other foods

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Anti-Nutrients cont.

- Lectins- Beans or grains
  - Proteins that bind to cell membranes
  - Can cause damage to intestinal tissue
- Enzyme inhibitors- block enzymes that help break down food
  - Soak for 12 hours in warm water (can add lemon or apple cider vinegar), change the water and cook thoroughly on high heat

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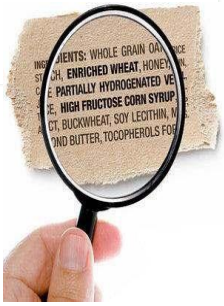
Label Reading



- Shop the perimeter of the store
- Look at ingredients not just nutrients and calories
- Sugar amount: 4 grams= 1 teaspoon
- Look for any words ending in "ose"
- Oils
- Additives
- "Natural" terms , "organic", heart healthy

70

Cooking Methods

- Avoid modified proteins and fats called *advanced glycation end products* (AGEs).
- AGEs increase inflammation leading to heart disease, obesity, arthritis, and cell aging
- AGEs develop when food is cooked on high or grilled, frying
- Best methods: Steaming, roasting, baking, sauteing
  - Avoid char/grill marks
  - Boiling leeches out nutrients

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Hydration

- Crucial for proper cellular function
- Rids the body of toxins, decreasing inflammation
- Dehydration slows down nutrient absorption and metabolism.
  - Affects the operation of every organ in body
- 1/2 your body weight in ounces per day

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Anti-Inflammatory Principles

- **Eat protein, healthy fat, and fiber at each meal**
  Ex: Veggie omelette with half an avocado for breakfast
- **Relatively high fat intake** (30-50% of diet)
  - Majority from monounsaturated fatty acids (olive oil)
  - Healthy saturated fats in moderation (coconut oil, ghee, grass-fed butter)
  - 1:1 omega-6:omega-3 ratio
- **Lots of low-glycemic fruit and vegetable consumption**
  - Dark, leafy greens, cruciferous veggies, berries

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Anti-inflammatory Principles cont.

- **Anti-inflammatory spices- turmeric, ginger, garlic**
- **Grass-fed meats and wild-caught fish, plant-based proteins such as beans and legumes**
- **High fiber consumption** (32 g/day)
- **Low in simple and quickly digested carbohydrates**

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Anti-inflammatory Principles cont.

- **Limit:**
  - Trans fats
  - Processed meats (hot dogs)
  - Gluten and other refined grains
  - Sugar and artificial sweeteners
  - Processed dairy
  - Vegetable oils

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Eat the Rainbow

- Diets rich in fruits and vegetables supply important antioxidants and phytochemicals that are powerful anti-inflammatory nutrients.
- **Brightly colored fruits and vegetables contain many beneficial plant compounds, called phytochemicals**.
  - Many of these compounds have antioxidant properties that can help to reduce inflammation.

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Anti-Inflammatory Lifestyle

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Sample Meal Plan- Breakfast

- Veggie omelette with side of 1/2 avocado
- Brussels sprouts, sweet potato, bacon hash w/ olive oil
- On-the-go smoothie: Almond milk, vanilla collagen protein powder, 1 tsp coconut oil, handful of spinach, ½ cup blueberries, ½ tsp cinnamon
- Egg bites made with eggs, turkey sausage and various vegetables
- Oatmeal with almonds and blueberries, side of chicken sausage

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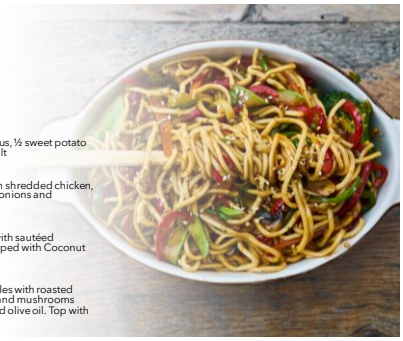
Sample Meal Plan: Dinner



- Grass-fed steak, roasted asparagus, ½ sweet potato topped w/ coconut oil and sea salt
- Roasted sweet potato stuffed with shredded chicken, Tessamae's Buffalo Ranch, green onions and avocado
- Stir fry: Cauliflower rice topped with sautéed veggies and beef or chicken. Topped with Coconut Aminos
- Veggie pasta: Banza brand noodles with roasted asparagus, red onions, broccoli, and mushrooms topped with balsamic vinegar and olive oil. Top with cashew "parmesan"

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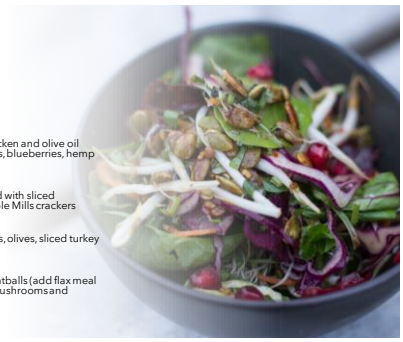
Sample Meal Plan: Lunch



- Spinach salad with shredded chicken and olive oil dressing (can add sliced almonds, blueberries, hemp seeds, etc.)
- Wild-caught tuna or salmon salad with sliced cucumbers, ½ avocado and Simple Mills crackers
- Bento box: Veggies with hummus, olives, sliced turkey and mustard, sliced apples
- Zucchini noodles with turkey meatballs (add flax meal instead of bread crumbs). Add mushrooms and onions to sauce for extra veggies
  - Top with nutritional yeast

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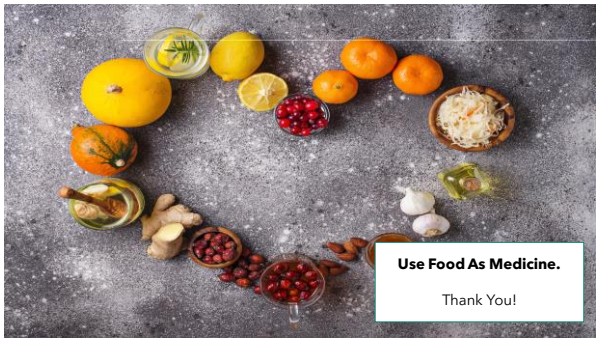

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