The Anti-Inflammatory Diet For Overall Health and Weight Loss



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THE BASICS

First, we need to cover the basics. You need to understand what this diet is and what you're attempting to do by following this diet. This diet is designed to help reduce inflammation, improve recovery/ repair, enhance detoxification, and promote body fat loss, it is not meant to treat, cure or diagnose any existing medical conditions.

There is a lot of misleading non-sense out there in the world of nutrition, so if you are serious about your health, then we recommend you adhere strictly to our guidelines and avoid any outside information. We've done a lot of research over the last 10 years and we're asking you to trust our guidelines. A combination of our recommendations jumbled up with other recommendations isn't going to help you. Again, if you want results, it is crucial that you ignore any outside influences (including your own current beliefs) and adhere strictly to this dietary plan. You are most likely going to be eliminating a lot of foods from your diet with this nutrition plan. We understand this is difficult but remember why you are doing this. Your health should be top priority and you should never feel bad about making choices to improve your health.

BRAIN AND BEHAVIOR - ACHIEVE YOUR GOALS

Interestingly, research has revealed that the anterior mid-cingulate cortex (AMCC), an area surrounding the corpus callosum in the central part of the brain, may play a major role in achieving goals. This part of the brain is heavily involved in perseverance, as in the ability to overcome an obstacle and persevere. In fact, studies have shown that when AMCC was stimulated with electrical activity, participants experienced the expectation of an impending challenge coupled with the strong desire to overcome the challenge. Therefore, some researchers have deemed the AMCC as the seat of will power in the human intellect.

Additionally, a thicker and more well developed AMCC has been correlated with better aging and may play a major role in preventing age associated delirium. When you refrain from doing something, as in refraining from eating certain foods and restricting yourself to the foods we recommend in this program, you will most likely be activating the AMCC. The more the AMCC is activated, the thicker and more developed it will become. So remember, you will be doing yourself a major favor by staying strict and adhering to our recommendations in this program. :)

Resources:

1. Parvizi, J., Rangarajan, V., Shirer, W. R., Desai, N., & Greicius, M. D. (2013). The will to persevere induced by electrical stimulation of the human cingulate gyrus. *Neuron*, *80*(6), 1359–1367. <u>https://doi.org/10.1016/j.neuron.2013.10.057</u>

2. Katsumi, Y., Wong, B., Cavallari, M., Fong, T. G., Alsop, D. C., Andreano, J. M., Carvalho, N., Brickhouse, M., Jones, R., Libermann, T. A., Marcantonio, E. R., Schmitt, E., Shafi, M. M., Pascual-Leone, A., Travison, T., Barrett, L. F., Inouye, S. K., Dickerson, B. C., & Touroutoglou, A. (2022). Structural integrity of the anterior mid-cingulate cortex contributes to resilience to delirium in SuperAging. *Brain communications*, *4*(4), fcac163. <u>https://doi.org/10.1093/braincomms/fcac163</u>

3. Alexandra Touroutoglou, Joseph Andreano, Bradford C. Dickerson, Lisa Feldman Barrett, The tenacious brain: How the anterior mid-cingulate contributes to achieving goals, Cortex, Volume 123, 2020, Pages 12-29, ISSN 0010-9452, https://doi.org/10.1016/j.cortex.2019.09.011.

THE KEYSTONES

We will do our best to explain our rationale for our specific dietary choices throughout this nutrition plan. Below we will discuss the pillars or keystones of this diet. These points are essential for your success:

1. This is a modified ketogenic diet, in that you will be following a very low carbohydrate diet, in the beginning, to increase the production of ketones in the body, and lower your blood sugar/ insulin release.

In case you don't know, a ketogenic diet is a diet that is high in protein and fat, and low in carbohydrates. Don't worry, you will eventually be adding some carbohydrates back in the diet. In case you are intimidated by the idea of jumping into a very low carbohydrate diet, we offer an option where you can transition into ketosis by slowly lowering your carbohydrate intake over a two week period.

In case you aren't sure what carbohydrates are: Carbohydrates are carbon containing foods that contain a 2:1 ratio of hydrogen to oxygen. Thus, they are "hydrated carbons", meaning they contain a decent amount water (H2O).

Carbohydrate food groups include grains (rice, wheat, barley etc.), starchy vegetables (potatoes, corn, turnips, rutabaga, butternut squash etc.), and fruits (bananas, berries, pineapple, papaya etc.) Yes, processed foods such as bagels, bread, pasta, muffins, cereal, pancakes etc. are carbohydrates and you will be strictly avoiding avoiding these foods (except for the occasional planned cheat but we'll get to that in a bit).

Here is why you are doing this:

Minimizing carbohydrate intake will lower blood sugar levels, which will help decrease insulin resistance, excess cortisol production, reduce inflammation, and lead to an elevated production of ketone bodies. When the production ketone bodies reaches a certain point (serum levels at or above 3.0 millimolar if you are curious) you are said to be in a state of "ketosis." Ketone bodies have antioxidant and anti-inflammatory properties in the body, meaning they can reduce inflammation, enhance detoxification, and promote recovery/ repair. The body also tends to utilize stored body fat for the production of ketone bodies, which can help to decrease body fat and promote further detoxification in the body.

In this diet, especially the first few weeks, we are going to recommend that about 55-60% of your calories come from fat, 35-40% from protein, and about 5% come from carbohydrates. Don't worry, you don't need to know the exact amount of calories you are consuming to eat proteins, fats and carbs in these specific ratios. We'll simplify that for you in the Meal Breakdown section. As previously mentioned, you will eventually be

adding some carbohydrates back into your diet (we'll get more into that when we cover the timeline and strategies in the Dietary Guidelines section).

Aside from body fat loss and reductions in inflammation, a ketogenic diet has been proven to have many additional benefits. Research has indicated that a ketogenic diet may improve cognitive function, as well as decrease risk of epileptic seizures, and several other diseases, including cardiovascular disease, cancer, diabetes, and neurodegenerative diseases such as Parkinson's disease. For more info on the benefits of a ketogenic diet, check out the resources below.

Resources:

1. Chung N. (2023). Impact of the ketogenic diet on body fat, muscle mass, and exercise performance: a review. *Physical activity and nutrition*, *27*(4), 1–7. https://doi.org/10.20463/pan.2023.0031

2. Dilliraj LN, Schiuma G, Lara D, Strazzabosco G, Clement J, Giovannini P, Trapella C, Narducci M, Rizzo R. The Evolution of Ketosis: Potential Impact on Clinical Conditions. *Nutrients*. 2022; 14(17):3613. Available at: <u>https://doi.org/10.3390/nu14173613</u>

3. Longo R, Peri C, Cricrì D, Coppi L, Caruso D, Mitro N, De Fabiani E, Crestani M. Ketogenic Diet: A New Light Shining on Old but Gold Biochemistry. Nutrients. 2019 Oct 17;11(10):2497. doi: 10.3390/ nu11102497. PMID: 31627352; PMCID: PMC6836190. Available at: <u>https://www.ncbi.nlm.nih.gov/pmc/</u> articles/PMC6836190/

4. Vallejo FA, Shah SS, de Cordoba N, Walters WM, Prince J, Khatib Z, Komotar RJ, Vanni S, Graham RM. The contribution of ketone bodies to glycolytic inhibition for the treatment of adult and pediatric glioblastoma. J Neurooncol. 2020 Apr;147(2):317-326. doi: 10.1007/s11060-020-03431-w. Epub 2020 Feb 24. PMID: 32096068. Available at: <u>https://pubmed.ncbi.nlm.nih.gov/32096068/</u>

5. Włodarek D. Role of Ketogenic Diets in Neurodegenerative Diseases (Alzheimer's Disease and Parkinson's Disease). Nutrients. 2019 Jan 15;11(1):169. doi: 10.3390/nu11010169. PMID: 30650523; PMCID: PMC6356942. Available at: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6356942/</u>

6. Jensen NJ, Wodschow HZ, Nilsson M, Rungby J. Effects of Ketone Bodies on Brain Metabolism and Function in Neurodegenerative Diseases. *International Journal of Molecular Sciences*. 2020; 21(22):8767. Available at: <u>https://doi.org/10.3390/ijms21228767</u>

7. Ahmed TB, Eggesbø M, Criswell R, Uhl O, Demmelmair H, Koletzko B. Total Fatty Acid and Polar Lipid Species Composition of Human Milk. *Nutrients*. 2022; 14(1):158. Available at: https://doi.org/10.3390/nu14010158

8. Wood, T.R.; Stubbs, B.J.; Juul, S.E. Exogenous Ketone Bodies as Promising Neuroprotective Agents for Developmental Brain Injury. *Dev. Neurosci.* **2018**, *40*, 451–462. Available at: <u>https://karger.com/dne/article/40/5-6/451/109123</u>

9. Simeone, T. A., Simeone, K. A., & Rho, J. M. (2017). Ketone Bodies as Anti-Seizure Agents. *Neurochemical research*, *42*(7), 2011–2018. <u>https://doi.org/10.1007/s11064-017-2253-5</u>

10. Neal, E. G., Chaffe, H., Schwartz, R. H., Lawson, M. S., Edwards, N., Fitzsimmons, G., Whitney, A., & Cross, J. H. (2008). The ketogenic diet for the treatment of childhood epilepsy: a randomised controlled trial. *The Lancet. Neurology*, *7*(6), 500–506. <u>https://doi.org/10.1016/S1474-4422(08)70092-9</u>

2. No Alcohol, Cigarettes, Processed Food or Seed Oils.

These products all cause inflammation in the body and have been linked to increased risk of mortality and cardiovascular disease (CVD). Aside from lung cancer, smoking cigarettes is a major cause of CVD and it is estimated that 1 in 4 CVD related deaths are due to smoking. For decades it has been asserted that a few drinks of alcohol may promote longevity but studies have shown that alcohol consumption, even at modest levels, increases risk of CVD. Processed foods are a common staple in most households but as convenient and affordable as these foods are, the risks heavily outweigh the benefits. In a prospective cohort study, it was concluded that regular consumption of processed foods greatly increases risk of CVD. Studies have also demonstrated that prolonged stress and a sedentary lifestyle, such as that of a typical office worker, greatly increase the risk of CVD.

Only whole foods should be consumed during this diet. A simple way to tell if it's a whole food or not is, if it comes in a package and has more than one ingredient, it's probably not a whole food. This obviously isn't true when it comes to rice, a food we recommend in this program for carbohydrate reloading. Rice is a whole food that comes in a package but there should only be one ingredient, rice. In addition, cold cuts are processed and should be avoided, instead, opt for fresh chicken, turkey, beef, elk, venison etc.

Manufacturers have claimed that vegetable/ seed oils, such as canola, corn, soy, sunflower, safflower, grapeseed and vegetable oil are heart healthy for years but studies may present a different story. Linoleic acid (LA) is an omega-6 polyunsaturated fatty acid (PUFA), and is the primary PUFA that is found in vegetable oils such as soy, corn and canola oil. The consumption of vegetable oils, in preference to other fat sources such as butter and lard, has increased dramatically since the early 1900's. LA is converted into gamma-linolenic acid (GLA), and GLA is broken down further into arachidonic acid (ARA) in the body. ARA is known to be heavily involved in the inflammatory pathway due to the presence of its fatty acids in the cell membranes of cells that are involved in inflammation. It acts as a precursor to several potent proinflammatory mediators such as prostaglandins and leukotrienes. The oxidation of LDL has long been thought to contribute to formation of CVD. Studies have noted that the oxidation of LA may invoke the oxidation of LDL.

Indeed, studies have concluded that LA increases adipose tissue, induces inflammation, and acts as a driver for coronary heart disease (CHD). These studies have also demonstrated that increases in adipose tissue concentrations of LA are directly correlated with increased risk of CHD or CVD, along with an increased risk of diabetes, obesity, asthma and all-cause mortality. In addition, seed oils have a low smoke point. This means they easily oxidize, or turn rancid, creating toxic byproducts, at low temperatures. This can further lead to inflammation and increased risk of CVD.

Instead of vegetable/ seed oils, extra virgin olive oil and coconut oil are a better choice and are on the recommended healthy fats list. Resources:

1. CDC. "SMOKING AND CARDIOVASCULAR DISEASE" 2014. available at: https:// www.cdc.gov/ tobacco/data_statistics/sgr/50th-anniversary/pdfs/fs_smoking_CVD_508.pdf

2. Biddinger KJ, Emdin CA, Haas ME, et al. "Association of Habitual Alcohol Intake With Risk of Cardiovascular Disease". JAMA Netw Open. 2022;5(3):e223849. doi:10.1001/ jamanetworkopen.2022.3849 available at: https://jamanetwork.com/journals/jamanetworkopen/ fullarticle/ 2790520

3. Steptoe, Andrew. "Stress and cardiovascular disease" Nat. Rev. Cardiol. 2012 Apr 3;9(6): 360-70. doi: 10.1038/nrcardio.2012.45. available at: <u>https://pubmed.ncbi.nlm.nih.gov/22473079/</u>

4. Srour, Bernard "Ultra-processed food intake and risk of cardiovascular disease: prospective cohort study" BMJ 2019; 365 doi: https://doi.org/10.1136/bmj.l1451 May 2019 Available at: <u>https://www.bmj.com/content/365/bmj.l1451</u>

5. Lavie, Carl J. "Sedentary Behavior, Exercise, and Cardiovascular Health" Circulation Research. Feb. 2019 doi.org/10.1161/CIRCRESAHA.118.312669 2019;124:799–815 available at: <u>https://www.ahajournals.org/doi/10.1161/CIRCRESAHA.118.312669</u>

6. DiNicolantonio, James J. "Omega-6 vegetable oils as a driver of coronary heart disease: the oxidized linoleic acid hypothesis" BMJ Journals. 2018. Volume 5, Issue 2. available at: https:// openheart.bmj.com/ content/5/2/e000898

Innes, Jacqueline K. "Omega-6 fatty acids and inflammation" Prostaglandins Leukot Essent Fatty Acids. 2018 May. doi: 10.1016/j.plefa.2018.03.004. Epub. available at: https:// pubmed.ncbi.nlm.nih.gov/29610056/

7. Hodgson, J M. "Can linoleic acid contribute to coronary artery disease?" Am J Clin Nutr. 1993 Aug. doi: 10.1093/ajcn/58.2.228. available at: <u>https://pubmed.ncbi.nlm.nih.gov/8192728/</u>

8. Ramsden, Christopher E. "Use of dietary linoleic acid for secondary prevention of coronary heart disease and death: evaluation of recovered data from the Sydney Diet Heart Study and updated metaanalysis" BMJ 2013;346:e8707. available at: https://www.bmj.com/content/346/ bmj.e8707

3. All foods consumed should be Organic Whole Foods, or at least grown organically, Grass-fed and Pastured Raised and Without the use of Antibiotics.

Organic foods have a higher nutritional content, contain less heavy metals, and are grown without the use of toxic chemical pesticides. Heavy metal poisoning and toxic chemical pesticides have been linked with many diseases, including cancer. Rather than counting calories, we recommend that you count chemicals. Meaning, avoid processed and non-organic foods because they are high in food additives, pesticides and heavy metals, which are all known to cause hormonal issues, inflammation, weight gain, cancer and cardiovascular disease

If you know the food was grown organically, and in good soil, it's okay if it's not certified organic. Grass-fed meat and dairy contains higher concentrations of vitamin A, omega 3 fatty acids (n-3 FAs) and conjugated linoleic acid (CLA). These vitamins and minerals play crucial roles in the immune system by acting as antioxidants, bone growth and formation, normal vision, reproduction, energy metabolism, and assisting the organs of the body in maintaining their general functions. Both n-3 FAs and CLA have been shown to play roles in the general function of cells, the production of certain hormones, the inflammatory response and protective roles in the immune and cardiovascular system. Therefore, they also play an important role in the prevention of cancer and CVD. Conventional grain-fed beef can be raised with antibiotics, contain higher heavy metal concentrations and has a less favorable fat ratio of omega 3 fatty acids to omega 6 fatty acids, as well as the ratio of saturated fats, such as lauric, myristic, and palmitic acids. This means it's more likely to cause inflammation and disease.

Resources:

1. Daley, Cynthia A et al. "A review of fatty acid profiles and antioxidant content in grass-fed and grain-fed beef." Nutrition journal vol. 9 10. 10 Mar. 2010, doi:10.1186/1475-2891-9-10 available at: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846864/</u>

2. Leaf, Alexander. "Clinical Prevention of Sudden Cardiac Death by n-3 Polyunsaturated Fatty Acids and Mechanism of Prevention of Arrhythmias by n-3 Fish Oils" AHA Journals. Circulation. 2003;107:2646–2652 available at: https://www.ahajournals.org/doi/full/ 10.1161/01.CIR.0000069566.78305.33

3. O'Shea, M. "Milk fat conjugated linoleic acid (CLA) inhibits growth of human mammary MCF-7 cancer cells" Anticancer Res. 2000;20(5B):3591-601. available at: https:// pubmed.ncbi.nlm.nih.gov/11131667/

4. Lehnen, T.E., da Silva, M.R., Camacho, A. et al. A review on effects of conjugated linoleic fatty acid (CLA) upon body composition and energetic metabolism. J Int Soc Sports Nutr 12, 36 (2015). https://doi.org/10.1186/s12970-015-0097-4 available at: https://jissn.biomedcentral.com/ articles/10.1186/s12970-015-0097-4

5. Barański, M., Srednicka-Tober, D., Volakakis, N., Seal, C., Sanderson, R., Stewart, G. B., Benbrook, C., Biavati, B., Markellou, E., Giotis, C., Gromadzka-Ostrowska, J., Rembiałkowska, E., Skwarło-Sońta,

K., Tahvonen, R., Janovská, D., Niggli, U., Nicot, P., & Leifert, C. (2014). Higher antioxidant and lower cadmium concentrations and lower incidence of pesticide residues in organically grown crops: a systematic literature review and meta-analyses. *The British journal of nutrition*, *112*(5), 794–811. <u>https://doi.org/10.1017/S0007114514001366</u>

In addition, more information on the importance of following an organic lifestyle and the dangers of pesticides can be found on our research and resources page at www.wolfmoonwellness.com

4. You can and should eat dairy on this diet.

Dairy has been the target of many a health campaign. Like any food, it comes down to the source. Raw grass-fed A2 milk from goats and cows is most easily digested and has been shown to provide many benefits. While A1 milk has been shown to have many adverse effects in the body. This disparity in milk proteins could explain why some people experience so many benefits from consuming dairy, and others experience adverse effects. Therefore, you should strive to consume raw A2 milk and avoid A1 milk.

Like grass-fed meat, dairy is high in n-3 FAs and CLA. It is a rich source of all fatsoluble vitamins (A,D,E,K) and important minerals/ electrolytes such as: calcium, phosphorus, magnesium, potassium, zinc, selenium, iodine, and iron, as well as several important B-vitamins. Milk is also a unique source of casein proteins that provide the body with all the essential amino acids needed to build muscle. Casein proteins are digested more slowly than other proteins so they may help to curb appetite as well. Fermented dairy products derived from milk provide a host of health benefits to the consumer. The healthy bacteria produced during the fermentation process makes the nutrients in the milk more digestible and aids in the establishment of symbiotic flora in the digestive system. Some of the beneficial components, such as specific proteins, bioactive peptides, oligosaccharides, and organic acids actually emerge during the digestive or fermentation processes. Studies have demonstrated that fermented dairy products may help to lower cholesterol levels, boost the immune system, aid in weight loss and protect against cancer, diabetes, and CVD.

<u>We don't recommend more than 3-4 servings of dairy a day while following this dietary</u> <u>plan.</u> Even though dairy is a super food, too much of anything can be a bad thing.

If you don't have access to raw dairy, strive to get dairy that was at least low heat processed (Ultra pasteurization exposes the dairy to the highest temperatures), non-homogenized, and of course, grass-fed.

If you know you are sensitive/ allergic to dairy, or lactose intolerant, you should obviously avoid dairy. Although, occasionally people who are lactose intolerant can consume raw dairy. Participants who consumed A2 milk in one study showed less symptoms of lactose intolerance compared to participants who consumed A1 milk. The group who consumed A2 milk also had no signs of abdominal pain. Additionally, butter, cream and ghee are all low in lactose and can be tolerated by some people with lactose intolerance

Resources:

1. O'Shea, M. "Milk fat conjugated linoleic acid (CLA) inhibits growth of human mammary MCF-7 cancer cells" Anticancer Res. 2000;20(5B):3591-601. available at: https:// pubmed.ncbi.nlm.nih.gov/11131667/

2. Lehnen, T.E., da Silva, M.R., Camacho, A. et al. A review on effects of conjugated linoleic fatty acid (CLA) upon body composition and energetic metabolism. J Int Soc Sports Nutr 12, 36 (2015). https://doi.org/10.1186/s12970-015-0097-4 available at: https://jissn.biomedcentral.com/ articles/10.1186/s12970-015-0097-4

3. Ebringer, L. "Beneficial health effects of milk and fermented dairy products—review" Folia Microbiology (Praha). 2008;53(5):378-94. doi: 10.1007/s12223-008-0059-1. available at: <u>https://pubmed.ncbi.nlm.nih.gov/19085072/</u>

4. González S, Fernández-Navarro T, Arboleya S, de los Reyes-Gavilán CG, Salazar N and Gueimonde M (2019) "Fermented Dairy Foods: Impact on Intestinal Microbiota and HealthLinked Biomarkers". Front. Microbiol. 10:1046. doi: 10.3389/fmicb.2019.01046 available at: <u>https://www.frontiersin.org/articles/10.3389/fmicb.2019.01046/full</u>

5. Alothman, Mohammad et al. "The "Grass-Fed" Milk Story: Understanding the Impact of Pasture Feeding on the Composition and Quality of Bovine Milk." Foods (Basel, Switzerland) vol. 8,8 350. 17Aug.2019, doi:10.3390/foods8080350 available at: https:// www.ncbi.nlm.nih.gov/pmc/articles/ PMC6723057/

6. Fernández-Rico, S., Mondragón, A. D. C., López-Santamarina, A., Cardelle-Cobas, A., Regal, P., Lamas, A., Ibarra, I. S., Cepeda, A., & Miranda, J. M. (2022). A2 Milk: New Perspectives for Food Technology and Human Health. *Foods (Basel, Switzerland)*, *11*(16), 2387. https://doi.org/10.3390/foods11162387

5. Strive to eat organ meats.

Organ meats, or offal, are among the most nutrient-dense foods on the planet. Organ meats have long been revered by ancient tribal cultures. The organs were considered to be the most valuable part of the animal. The belief was that consuming these parts of the animal would transfer the energy of the animal to our parts. It is well established that organ meats are a nutritional powerhouse. Organs have been shown to contain high amounts of: B12, B6, vitamin C, zinc, copper, selenium, all the fat soluble vitamins: A, D, E, and K, Coenzyme Q10 (CoQ10) (an important antioxidant), choline (an important nutrient for cellular growth that most people are deficient in), and all 9 essential amino acids. Organ meats such as liver and heart are an excellent source of CoQ10. More and more research is emerging indicating that deficiencies of CoQ10 may play a role in the development of CVD and foods sources high in and/or supplementation of CoQ10 may be a crucial component in the prevention of cardiovascular disease.

If you think organ meats are gross, more options have emerged in the last decade or so when it comes to eating organ meats. This includes ground beef mixed with ground organs (not as gamy), dehydrated organ crisps, and encapsulated beef organs.

Resources:

1. Biel, Wioletta et al. "Offal Chemical Composition from Veal, Beef, and Lamb Maintained in Organic Production Systems." Animals : an open access journal from MDPI vol. 9,8 489. 26 Jul. 2019, doi:10.3390/ani9080489 available at: https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC6721235/

2. Saini, Rajiv. "Coenzyme Q10: The essential nutrient." Journal of pharmacy & bioallied sciences vol. 3,3 (2011): 466-7. doi:10.4103/0975-7406.84471 available at: https:// www.ncbi.nlm.nih.gov/pmc/articles/ PMC3178961/

3. Zozina, Vladlena I et al. "Coenzyme Q10 in Cardiovascular and Metabolic Diseases: Current State of the Problem." Current cardiology reviews vol. 14,3 (2018): 164-174. doi: 10.2174/1573403X14666180416115428 available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6131403/

6. Make sure you are drinking water that is filtered from a source that is proven to remove heavy metals, toxins, plastics, pesticides etc.

The Brita and the filter from your fridge won't successfully remove these toxins. You will need a better filtration system, such as reverse osmosis, aquasana, or Boroux countertop filtration systems. Lead, nitrates and nitrites, arsenic, disinfection byproducts, microplastics, pesticides, solvents, bacteria, fluoride and chlorine are some of the most common contaminants found in drinking water. All of which, cause inflammation and disease. Even bottled water that has been filtered contains microplastics, unless it is stored in a glass bottle or container.

While many people are used to the idea of chlorinating water for safety, studies have shown that drinking and bathing in chlorinated water increases risk of cancer. What's even scarier is that chlorine by-products are probably not the worst thing in your water. If you live in Suffolk County, New York, a report from the EWG concluded that there were 9 contaminants found in the water supply that exceeded the EWG Health Guidelines. All of these contaminants are known to cause cancer. Here is a link to that report:

https://www.ewg.org/tapwater/system.php?pws=NY5110526

If you don't live in Suffolk County, we recommend looking up what contaminants have been found in your water because these contaminants are being found in water supplies all over the country. Again, only very high quality filters will be able to remove these toxins.

Resources:

 Gordon, S. M., Brinkman, M. C., Ashley, D. L., Blount, B. C., Lyu, C., Masters, J., & Singer, P. C. (2006). Changes in breath trihalomethane levels resulting from household water-use activities. *Environmental health perspectives*, *114*(4), 514–521. <u>https://doi.org/10.1289/ehp.8171</u>

2. Beane Freeman, L. E., Kogevinas, M., Cantor, K. P., Villanueva, C. M., Prokunina-Olsson, L., Florez-Vargas, O., Figueroa, J. D., Ward, M. H., Koutros, S., Baris, D., Garcia-Closas, M., Schwenn, M., Johnson, A., Serra, C., Tardon, A., Garcia-Closas, R., Carrato, A., Malats, N., Karagas, M. R., Rothman, N., ... Silverman, D. T. (2022). Disinfection By-Products in Drinking Water and Bladder Cancer: Evaluation of Risk Modification by Common Genetic Polymorphisms in Two Case-Control Studies. *Environmental health perspectives*, *130*(5), 57006. <u>https://doi.org/10.1289/EHP9895</u>

3. Group, E. W. (n.d.-b). *EWG's tap water database: What's in your drinking water*? EWG Tap Water Database. https://www.ewg.org/tapwater/system.php?pws=NY5110526

7. You will need extra electrolytes.

A ketogenic diet is a wonderful tool for reducing inflammation, improving recovery, body fat loss, neurological protection, cancer prevention etc. but there is something you should be aware of; When following a ketogenic diet, you will be more prone to electrolyte imbalances. Many researchers suspect that the so called, "keto flu," is most likely due to electrolyte imbalances that are associated with a ketogenic diet. In reality, symptoms associated with the keto flu are probably from a combination of detox symptoms and electrolyte imbalances. To compensate for low electrolyte levels, and help mitigate keto flu symptoms, you will need to supplement electrolytes on a daily basis. Please be aware that you may still experience some detox symptoms, even when supplementing with electrolytes.

The most prominent electrolytes in the body are sodium, chloride, potassium, calcium and magnesium. There are many electrolyte supplements, unfortunately, most of them contain harmful extra ingredients or contaminants, such as heavy metals, fillers, additives, flow agents and other chemicals. To avoid unnecessary exposure to these toxins, we recommend using a higher quality sea salt with your meals, and adding a pinch of salt to your water. Make sure it is salt that is proven to be lower in heavy metals and high in mineral content, such as Maldon or Jacobsen Sea Salt. In addition, a high quality calcium/ magnesium powder can also be added to your water. Unfortunately, many salts that are touted as high quality and pure are actually loaded with heavy metals. Below is a link to an article by Mamavation, where popular brands of salts were tested for heavy metal contamination. The results were a bit shocking, as many of these salts contained levels of heavy metals far beyond the recommendations of the FDA and Agency for Toxic Substances:

https://www.mamavation.com/food/sea-salt-himalayan-salt-heavy-metals-lead.html

Don't fear salt, sodium and chloride are necessary nutrients utilized in many processes in the body. In addition, low salt diets have been linked with higher risk of cardiovascular disease. You will need a regular intake of sea salt when following this diet.

If you would like to learn more about the dangers of low salt diets, you can read our blog post, "HIGH BLOOD PRESSURE: IS A LONG TERM LOW SALT DIET THE ANSWER?"

Resources:

1. Fayet-Moore, F., Wibisono, C., Carr, P., Duve, E., Petocz, P., Lancaster, G., McMillan, J., Marshall, S., & Blumfield, M. (2020). An Analysis of the Mineral Composition of Pink Salt Available in Australia. Foods (Basel, Switzerland), 9(10), 1490. https://doi.org/ 10.3390/foods9101490

2. Cheraghali, A. M., Kobarfard, F., & Faeizy, N. (2010). Heavy metals contamination of table salt consumed in iran. Iranian journal of pharmaceutical research : IJPR, 9(2), 129–132.

8. Addressing myths and misconceptions.

As you've probably noticed, a lot of the food staples we recommend in this diet have been demonized for many years and are generally recommended to be avoided by so called "health authorities." We've already addressed the low salt misconception. Another example, red meat, organ meats, eggs and dairy are often scrutinized for their higher saturated fat and dietary cholesterol content. We have an entire research article, "THE SATURATED FAT AND DIETARY CHOLESTEROL MISCONCEPTION," dedicated to addressing this conjecture on our blog page. Resources such as this and many more can be found on our blog page and our research and resources page at www.wolfmoonwellness.com

9. Pay attention for food allergies and sensitivities.

This is one of the major reasons why it's not good to eat a vast array of different foods all the time. Eating many different foods, especially foreign foods, all the time opens the door to food sensitivities, allergies and intolerances. All of which can cause weight gain, inflammation, digestive distress, joint aches and pains etc. When you're eating a large variety of foods all the time, you're probably not eating with the seasons. If there is one major point we would like to get across, it's this; Keep it simple! Our ancestors would have followed a fairly steady diet and eaten with the seasons. Since we evolved from them, it's probably a good idea to follow in their foot steps.

While the foods we are recommending in this diet are generally loaded with vitamins, minerals and antioxidants, and are known to help reduce inflammation; you could be sensitive to any one of the good foods recommended in this plan. Pay attention to how you feel each day and if you notice any abnormal gas, bloating, joints aches and pain, congestion etc. If you do experience these symptoms, you could be sensitive to one or more foods. The best way to figure it out is to keep a food journal and note the times these symptoms appeared. See if you can correlate it to a particular food you ate within the last 12 hours or so. For example, if every time you eat blueberries, you notice these symptoms appearing within 3 or 4 hours, you could be sensitive to blueberries. Aside from blood tests, there are also different tests and kits that can be found online for food sensitivities, although the accuracy of some of these tests is frequently called into question. Applied kinesiology testing is another great way to test for food sensitivities, you would have to find a practitioner near you to test you.

Some less obvious food allergy/ sensitivity symptoms can include headaches/ migraines, skin rash, nasal congestion, bloating, gas, diarrhea, constipation, nausea, arthritis/ inflammation, irritability, lethargy and anxiety.

10. No foods high in oxalic acid, or other anti-nutrients that are known to cause inflammation and digestive distress.

You should avoid foods that are high in anti-nutrients, such as oxalic acid, lectins and phytic acid at all costs while following this diet. Many of these foods have been claimed to be "super foods" so be careful. These foods can interfere with nutrient absorption and trigger arthritic flare ups, digestive inflammation, IBS, constipation, skin rashes, vascular inflammation and kidney stones. Oxalates have also been linked with an increased risk of cancer and cardiovascular disease (CVD)! For your convenience we created a list, "Foods To Avoid That Are High in Oxalic Acid, Phytoestrogens, or Other Anti-Nutrients And Cause Inflammation," of common foods that have been touted as healthy for years but are actually high in oxalic acid and other anti-nutrients. You can find that list under the category of, "Foods To Avoid That Are High in Oxalic Acid, Phytoestrogens, or Other Anti-Nutrients And Cause Inflammation." If you stick to the recommended lists we've provided, you won't have any problems. We'll get more into explaining how these lists work in the, "Dietary Guidelines" section.

Oxalic acid is a plant toxin that certain minerals, such as calcium, have an affinity for. These minerals will bind to oxalic acid, forming an oxalate crystal. In the case of calcium, calcium oxalate crystals are formed when bound to oxalic acid.

The most common type of kidney stone is calcium oxalate. Many doctors recommend limiting calcium intake with cases of kidney stone formation. This is absurd! In fact, studies have shown an increased risk of CVD with a diet that is low in calcium and high in oxalates. Calcium is vital for an array of body functions, while oxalic acid has no functional use in the body. Doesn't it make more sense to limit intake of oxalic acid rather than calcium?

Foods high in oxalic acid can trigger arthritic flare ups, digestive inflammation, vascular inflammation and kidney stones. Oxalates can produce oxidative stress in the tissues and vessels, and have therefore been associated with premature aging, and an increased risk of cancer and cardiovascular disease. In fact, one study showed that the oxidative stress from oxalates may induce premature senescence (premature aging) by shortening telomeres! In case you don't know, cellular senescence is the age associated arrest of a cell. Senescent cells begin to accumulate as we age. Researchers have nicknamed senescent cells, "zombie cells" because they no longer function properly and can disrupt normal cellular processes. Basically, the more zombie cells we accumulate, the more we age.

Resources:

1. Pfau A, Ermer T, Coca SG, Tio MC, Genser B, Reichel M, Finkelstein FO, März W, Wanner C, Waikar SS, Eckardt KU, Aronson PS, Drechsler C, Knauf F. High Oxalate Concentrations Correlate with Increased Risk for Sudden Cardiac Death in Dialysis Patients. J Am Soc Nephrol. 2021 Sep;32(9):2375-2385. doi: 10.1681/ASN.2020121793. Epub 2021 Jul 19. PMID: 34281958; PMCID: PMC8729829.

2. Castellaro AM, Tonda A, Cejas HH, Ferreyra H, Caputto BL, Pucci OA, Gil GA. Oxalate induces breast cancer. BMC Cancer. 2015 Oct 22;15:761. doi: 10.1186/s12885-015-1747-2. PMID: 26493452; PMCID: PMC4618885.

3. Amin R, Asplin J, Jung D, Bashir M, Alshaikh A, Ratakonda S, Sharma S, Jeon S, Granja I, Matern D, Hassan H. Reduced active transcellular intestinal oxalate secretion contributes to the pathogenesis of obesity-associated hyperoxaluria. Kidney Int. 2018 May;93(5):1098-1107. doi: 10.1016/j.kint.2017.11.011. Epub 2018 Feb 1. PMID: 29395336; PMCID: PMC5963707.

4. Ermer T, Eckardt KU, Aronson PS, Knauf F. Oxalate, inflammasome, and progression of kidney disease. Curr Opin Nephrol Hypertens. 2016 Jul;25(4):363-71. doi: 10.1097/MNH.00000000000229. PMID: 27191349; PMCID: PMC4891250.

5. Bahadoran, Z., Mirmiran, P. & Azizi, F. Dietary oxalate to calcium ratio and incident cardiovascular events: a 10-year follow-up among an Asian population. *Nutr J* **21**, 21 (2022). <u>https://doi.org/10.1186/s12937-022-00773-1</u>

6. Sun, K., Tang, X., Song, S., Gao, Y., Yu, H., Sun, N., Wen, B., & Mei, C. (2021). Hyperoxalemia Leads to Oxidative Stress in Endothelial Cells and Mice with Chronic Kidney Disease. *Kidney & blood pressure research*, *46*(3), 377–386. <u>https://doi.org/10.1159/000516013</u>

7. Wilson, G. J., Gois, P. H. F., Zhang, A., Wang, X., Law, B. M. P., Kassianos, A. J., & Healy, H. G. (2018). The Role of Oxidative Stress and Inflammation in Acute Oxalate Nephropathy Associated With Ethylene Glycol Intoxication. *Kidney international reports*, *3*(5), 1217–1221. <u>https://doi.org/10.1016/j.ekir.2018.05.005</u>

8. Lorenz, E. C., Michet, C. J., Milliner, D. S., & Lieske, J. C. (2013). Update on oxalate crystal disease. *Current rheumatology reports*, *15*(7), 340. <u>https://doi.org/10.1007/s11926-013-0340-4</u>

9. Hatch M. (2017). Gut microbiota and oxalate homeostasis. *Annals of translational medicine*, *5*(2), 36. <u>https://doi.org/10.21037/atm.2016.12.70</u>

10. Whittamore, J. M., & Hatch, M. (2017). The role of intestinal oxalate transport in hyperoxaluria and the formation of kidney stones in animals and man. *Urolithiasis*, *45*(1), 89–108. <u>https://doi.org/10.1007/s00240-016-0952-z</u>

11. Chuenwisad, K., More-Krong, P., Tubsaeng, P., Chotechuang, N., Srisa-Art, M., Storer, R. J., & Boonla, C. (2021). Premature Senescence and Telomere Shortening Induced by Oxidative Stress From Oxalate, Calcium Oxalate Monohydrate, and Urine From Patients With Calcium Oxalate Nephrolithiasis. *Frontiers in immunology*, *12*, 696486. <u>https://doi.org/10.3389/fimmu.2021.696486</u>

12. Bargagli, M., Tio, M. C., Waikar, S. S., & Ferraro, P. M. (2020). Dietary Oxalate Intake and Kidney Outcomes. *Nutrients*, *12*(9), 2673. <u>https://doi.org/10.3390/nu12092673</u>

13. Science Direct. (n.d.). *Phytic acid*. Phytic Acid - an overview | ScienceDirect Topics. https: www.sciencedirect.com/topics/neuroscience/phytic-acid

14. Sakr, H., Khired, Z., & Moghadas, M. (2023). In Rats, Whole and Refined Grains Decrease Bone Mineral Density and Content through Modulating Osteoprotegerin and Receptor Activator of Nuclear Factor Kappa B. *Biomedicines*, *11*(6), 1686. <u>https://doi.org/10.3390/biomedicines11061686</u>

15. Adamcová, A., Laursen, K. H., & Ballin, N. Z. (2021). Lectin Activity in Commonly Consumed Plant-Based Foods: Calling for Method Harmonization and Risk Assessment. *Foods (Basel, Switzerland)*, *10*(11), 2796. <u>https://doi.org/10.3390/foods10112796</u>

16. Freed D. L. (1999). Do dietary lectins cause disease?. *BMJ (Clinical research ed.)*, *318*(7190), 1023–1024. <u>https://doi.org/10.1136/bmj.318.7190.1023</u>

11. Strive To Avoid Certain High FODMAP Foods.

FODMAPs, which stands for fermentable oligosaccharides, disaccharides, monosaccharides, and polyols, have been known to cause digestive symptoms, such as IBS, diarrhea, bloating and cramping. These are short-chain carbohydrates (sugars) that are poorly absorbed in the small intestine, and eventually make their way to the large intestine, where they ferment and can cause a host of issues. In addition, FODMAPS have been shown to cause significantly higher levels of histamine and inflammation through the activation of mast cells.

It should be noted that people may not react to all high FODMAP foods. That's why we've only included the ones we feel are most detrimental. If you stick to the green food lists we've provided in the, "Food Lists," section. You shouldn't have any problems. If you are prone to IBS you should look up more detailed lists of high FODMAP foods so you can be aware of all potential foods to avoid. Remember, foods high in oxalic acid produce oxalates that can also trigger IBS (This is mentioned in Keystone 10 above). Almost all foods offered in the green lists are considered low in oxalic acid, and most are low in FODMAPs.

Some high FODMAP foods to avoid include:

wheat, corn, garlic and onion

Beans and Legumes- baked beans, black beans, fava beans, lentils, black-eyed peas, kidney beans, pinto beans, almonds, cashews, pistachios, chick peas, snow peas, split peas, rye, peas, soybeans

Vegetables- cauliflower, asparagus, brussel sprouts, beets.

Resources:

1. Singh, P., Grabauskas, G., Zhou, S. Y., Gao, J., Zhang, Y., & Owyang, C. (2021). High FODMAP diet causes barrier loss via lipopolysaccharide-mediated mast cell activation. *JCI insight*, *6*(22), e146529. https://doi.org/10.1172/jci.insight.146529

2. Cox, S. R., Lindsay, J. O., Fromentin, S., Stagg, A. J., McCarthy, N. E., Galleron, N., Ibraim, S. B., Roume, H., Levenez, F., Pons, N., Maziers, N., Lomer, M. C., Ehrlich, S. D., Irving, P. M., & Whelan, K. (2020). Effects of Low FODMAP Diet on Symptoms, Fecal Microbiome, and Markers of Inflammation in Patients With Quiescent Inflammatory Bowel Disease in a Randomized Trial. *Gastroenterology*, *158*(1), 176–188.e7. https://doi.org/10.1053/j.gastro.2019.09.024

12. No Nuts, Seeds, or Legumes, Except Coconut.

In general, nuts, seeds and legumes are difficult to digest, tend to irritate the lining of the gut, and can trigger gas, bloating, constipation, skin rashes, arthritis, hormonal imbalances, IBS and inflammation in the intestines. They can be high in oxalic acid, lectins, phytic acid, and polyunsaturated fats, all of which in moderate to high doses can either lead to inflammation or interfere with nutrient absorption. They may also contain hormone disrupting compounds such as phytoestrogens (from lignans) and sex hormone binding globulins (SHBG). These compounds can interfere with important hormones, such as testosterone and estrogen, which can cause a host of issues in the body. In addition, many people can be sensitive/ allergic to nuts and seeds and have no idea.

Technically, coconut is a fruit but the FDA labels coconut as a tree nut, that's why we're addressing it here. The good news is that coconut contains no oxalates or lectins, and is low in phytic acid. Further, coconut contains many antioxidants, such as tocopherols, tocotrienols, phytosterols, flavonoids and polyphenols. It is also an excellent fat source, since it is high in medium chain triglycerides (MCTs). Studies have found that body fat loss was significantly enhanced when following a ketogenic diet supplemented with MCTs. MCTs stay intact when they are absorbed in the small intestine, as such they are able to be utilized as an immediate source of energy, similar to carbohydrates. Therefore, consumption of coconut may help to increase energy levels.

Coconut water and coconut sugar are generally higher in sugar and should be avoided while following this program, but whole coconut, coconut flakes, coconut butter and coconut oil are all excellent fat sources. There has been some fear mongering in regard to the higher saturated fat content in coconut. As previously mentioned, we address such misconceptions in our detailed article, "THE SATURATED FAT AND DIETARY CHOLESTEROL MISCONCEPTION," which can be found on our blog page at www.wolfmoonwellness.com

Resources:

1. Nowak, D. A., Snyder, D. C., Brown, A. J., & Demark-Wahnefried, W. (2007). The Effect of Flaxseed Supplementation on Hormonal Levels Associated with Polycystic Ovarian Syndrome: A Case Study. *Current topics in nutraceutical research*, *5*(4), 177–181.

2. Demark-Wahnefried, W., Price, D. T., Polascik, T. J., Robertson, C. N., Anderson, E. E., Paulson, D. F., Walther, P. J., Gannon, M., & Vollmer, R. T. (2001). Pilot study of dietary fat restriction and flaxseed supplementation in men with prostate cancer before surgery: exploring the effects on hormonal levels, prostate-specific antigen, and histopathologic features. *Urology*, *58*(1), 47–52. <u>https://doi.org/10.1016/s0090-4295(01)01014-7</u>

3. Wang Y. (2021). Tree nut consumption is associated with higher sex hormone-binding globulin levels in premenopausal US women. *Nutrition research (New York, N.Y.)*, *93*, 61–68. <u>https://doi.org/10.1016/j.nutres.2021.07.003</u>

4. Li, C., Ford, E. S., Li, B., Giles, W. H., & Liu, S. (2010). Association of testosterone and sex hormonebinding globulin with metabolic syndrome and insulin resistance in men. *Diabetes care*, *33*(7), 1618– 1624. <u>https://doi.org/10.2337/dc09-1788</u>

5. Adamcová, A., Laursen, K. H., & Ballin, N. Z. (2021). Lectin Activity in Commonly Consumed Plant-Based Foods: Calling for Method Harmonization and Risk Assessment. *Foods (Basel, Switzerland)*, *10*(11), 2796. <u>https://doi.org/10.3390/foods10112796</u>

6. Freed D. L. (1999). Do dietary lectins cause disease?. *BMJ (Clinical research ed.)*, *318*(7190), 1023–1024. https://doi.org/10.1136/bmj.318.7190.1023

7. Nagata, C., Takatsuka, N., Kawakami, N., & Shimizu, H. (2000). Relationships between types of fat consumed and serum estrogen and androgen concentrations in Japanese men. *Nutrition and cancer*, 38(2), 163–167. <u>https://doi.org/10.1207/S15327914NC382_4</u>

Kalgaonkar, S., Almario, R. U., Gurusinghe, D., Garamendi, E. M., Buchan, W., Kim, K., & Karakas, S. E. (2011). Differential effects of walnuts vs almonds on improving metabolic and endocrine parameters in PCOS. *European journal of clinical nutrition*, 65(3), 386–393. <u>https://doi.org/10.1038/ejcn.2010.266</u>
Vetrani, C., Verde, L., Savastano, S., Colao, A., Muscogiuri, G., & Barrea, L. (2023). Supplementation with medium-chain fatty acids increases body weight loss during very low-calorie ketogenic diet: a retrospective analysis in a real-life setting. *Journal of translational medicine*, *21*(1), 29. <u>https://doi.org/10.1186/s12967-023-03880-7</u>

10. Boateng, L., Ansong, R., Owusu, W. B., & Steiner-Asiedu, M. (2016). Coconut oil and palm oil's role in nutrition, health and national development: A review. *Ghana medical journal*, *50*(3), 189–196. <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5044790/</u>

13. You Should Be Eating 2-3 Meals a Day Within an 8 Hour Window and an Occasional Fast.

Eating within an 8 hour window is known as "time restrictive feeding." Studies have shown that time restrictive feeding may provide several advantages, including body fat loss, improved microbiome in the gut, positive hormonal balance, reduced risk of CVD, asthma, diabetes and arthritis. We know what you're probably thinking, "This program is way too strict!" We've put forth our effort to bring you a program that will deliver the best results possible, not to appease your inner child. Remember, you are doing this to improve your health and vitality. It's not going to be a picnic, but the good news it that we've never heard of someone fully committing to improving their health/ wellbeing and regretting it. Have you?

Your 8 hour window can be from 10am-6pm or 9am-5pm, whatever works for you.

Fasting has been shown to decrease body fat, improve cognitive function, improve digestive health, regulate blood sugar, and help protect against several diseases including cancer, diabetes and cardiovascular disease. You will find several bouts of

fasting in this program, in which you will be consistently progressed to longer fasts. Yes, fasting feels difficult while you are in the middle of a fast. However, many people find the challenge of fasting to be rewarding, especially when the fast is completed. Your next meal will never have tasted so good, and you will also start to feel the benefits of the fast!

Resources:

1. Paoli, A., Tinsley, G., Bianco, A., & Moro, T. (2019). The Influence of Meal Frequency and Timing on Health in Humans: The Role of Fasting. *Nutrients*, *11*(4), 719. <u>https://doi.org/10.3390/nu11040719</u>

2. Ferrocino, I., Pellegrini, M., D'Eusebio, C., Goitre, I., Ponzo, V., Fadda, M., Rosato, R., Mengozzi, G., Beccuti, G., Merlo, F. D., Rahimi, F., Comazzi, I., Cocolin, L., Ghigo, E., & Bo, S. (2022). The Effects of Time-Restricted Eating on Metabolism and Gut Microbiota: A Real-Life Study. *Nutrients*, *14*(13), 2569. https://doi.org/10.3390/nu14132569

3. Tagliafico, L., Nencioni, A., & Monacelli, F. (2023). Fasting and Cognitive Impairment. *Nutrients*, *15*(24), 5108. <u>https://doi.org/10.3390/nu15245108</u>

4. Wang, Y., & Wu, R. (2022). The Effect of Fasting on Human Metabolism and Psychological Health. *Disease markers*, *2022*, 5653739. <u>https://doi.org/10.1155/2022/5653739</u>

5. Saglam, D., Colak, G. A., Sahin, E., Ekren, B. Y., Sezerman, U., & Bas, M. (2023). Effects of Ramadan intermittent fasting on gut microbiome: is the diet key?. *Frontiers in microbiology*, *14*, 1203205. <u>https://doi.org/10.3389/fmicb.2023.1203205</u>

14. No snacking between meals

No, not even if it's a "healthy" snack. Snacks can lead to unwanted weight gain and a reduction of hunger at meal times, which could lead you to under eat your meals and overeat snacks. We want your body to maintain a fasted state between meals, this will allow for better digestion, autophagy, reduced inflammation and blood sugar and hormonal balance. Don't worry, if you've always snacked between meals, you will get used to not snacking quickly when following this diet because you will be eating foods that will satiate you for hours.

Instead of snacking, just eat what would be a snack to you with your meal. For example, yogurt is typically considered a snack food; rather than eating your yogurt between meals, eat it with a meal. It's probably not as hard as you think.

15. No grains, except sprouted brown rice and white basmati rice.

Grains have been touted as an essential super food for years. A lot of this is due to clever marketing from food companies that sell products containing grains. Sure, some ancient cultures, as well as our not so distant ancestors, were eating grains. This is because they were cheap, fairly easy to grow and have a long shelf life. From a survival standpoint, this provides an advantage. From a health stand point, grains tend to be high in phytic acid and saponins, both of which can interfere with the absorption of important minerals, such as iron, zinc, magnesium, and calcium. Phytic acid chelates with these minerals, pulling them from the body. This could lead to mineral deficiencies over time.

Some researchers have studied the skeletal remains of ancient societies that began to incorporate agriculture (as in growing grains for food), rather than hunting and gathering as a staple food source. Reductions in height, muscle mass and bone density were noted in the societies that switched to a more agricultural based diet. Researchers suspect the decrease in bone mineral density was most likely from a reduction in physical activity and a change in diet from more nutritious wild game sources to more agricultural based food sources such as grains. Studies on rats that were fed whole and refined grains have also shown decreases in bone mineral density. Interestingly, rats from both groups, the group fed refined grains and the group fed whole grains, experienced a decline in bone mineral density.

Further, grain products, such as bread, muffins, bagels, cereal, cookies etc. commonly contain a carcinogenic chemical known as acrylamide. Acrylamide forms when grains are exposed to higher temperatures, such as when baking and frying. When the sugars in grains, such as glucose and fructose, are exposed to heat, they react with the amino acid asparagine to produce acrylamide. Studies have portrayed that a regular intake of moderate to high doses of acrylamide is associated with an increased risk of cancer. Another concern is that acrylamide can cross the blood-placental barrier. In such cases, even a smaller dose of acrylamide could have a more significant impact on the developing baby, increasing the risk of neurotoxic effects and developmental issues. Since acrylamide forms naturally from heating processes such as baking, even organic and home-made grain products will contain acrylamide.

Moreover, grains contain complex proteins and fructans (non-digestible carbohydrates) that are difficult for many people to digest and may trigger immunoreactivity. Recent studies have shown that the nutritional quality of grains has declined over the last 166 years, with grains today containing higher amounts of starches and lower mineral contents. While the amount of gluten has remained fairly constant, the composition of gluten has also changed. The proportions of gliadins in gluten have decreased, and the proportions of glutenins have increased. Researchers are puzzled by this because gliadins are usually suspected of causing immunoreactivity, yet the concentration of gliadins has decreased, and gluten and grain intolerances seem to be increasing over the last few decades. Fructans along with other proteins in grains have been suspected

as possible culprits but more research needs to be conducted in order to determine why gluten and grain intolerances are becoming more prevalent in our society.

Sprouted or germinated brown rice and white rice, on the other hand, are naturally gluten free and well tolerated by most individuals. In comparison to brown rice, white rice does not contain the husk, bran, and germ, which makes it more digestible for most individuals. White rice is also known to be lower in heavy metals such as arsenic. Sprouted brown rice is easier to digest than regular brown rice because sprouting or germinating softens the bran layer. This allows the rice to cook faster, easier and become softer than traditional brown rice. The germination process has also been shown to significantly reduce levels of arsenic. Sprouted brown rice and ten times the amount of GABA compared to traditional brown rice and ten times the amount compared to white. GABA is an important neurotransmitter that produces a calming effect in the nervous system and may help to increase production of growth hormone. These two grains are the only grains recommended in the carbohydrate reloading category under the heading, "Carbohydrates For Carb Reloading".

Resources:

1. Kralick, A. E., & Zemel, B. S. (2020). Evolutionary Perspectives on the Developing Skeleton and Implications for Lifelong Health. *Frontiers in endocrinology*, *11*, 99. <u>https://doi.org/10.3389/</u><u>fendo.2020.00099</u>

2. Science Direct. (n.d.). *Phytic acid*. Phytic Acid - an overview | ScienceDirect Topics. https: www.sciencedirect.com/topics/neuroscience/phytic-acid

3. Sakr, H., Khired, Z., & Moghadas, M. (2023). In Rats, Whole and Refined Grains Decrease Bone Mineral Density and Content through Modulating Osteoprotegerin and Receptor Activator of Nuclear Factor Kappa B. *Biomedicines*, *11*(6), 1686. <u>https://doi.org/10.3390/biomedicines11061686</u>

4. Mariem, S. B., Gámez, A. L., Larraya, L., Fuertes-Mendizabal, T., Cañameras, N., Araus, J. L., McGrath, S. P., Hawkesford, M. J., Murua, C. G., Gaudeul, M., Medina, L., Paton, A., Cattivelli, L., Fangmeier, A., Bunce, J., Tausz-Posch, S., Macdonald, A. J., & Aranjuelo, I. (2020). Assessing the evolution of wheat grain traits during the last 166 years using archived samples. *Scientific reports*, *10*(1), 21828. <u>https://doi.org/10.1038/s41598-020-78504-x</u>

5. Brouns, F., Geisslitz, S., Guzman, C., Ikeda, T. M., Arzani, A., Latella, G., Simsek, S., Colomba, M., Gregorini, A., Zevallos, V., Lullien-Pellerin, V., Jonkers, D., & Shewry, P. R. (2022). Do ancient wheats contain less gluten than modern bread wheat, in favour of better health?. *Nutrition bulletin*, *47*(2), 157–167. <u>https://doi.org/10.1111/nbu.12551</u>

6. Su, L. J., Chiang, T. C., & O'Connor, S. N. (2023). Arsenic in brown rice: do the benefits outweigh the risks?. *Frontiers in nutrition*, *10*, 1209574. <u>https://doi.org/10.3389/fnut.2023.1209574</u>

7. Patil, S. B., & Khan, M. K. (2011). Germinated brown rice as a value added rice product: A review. *Journal of food science and technology*, *48*(6), 661–667. <u>https://doi.org/10.1007/s13197-011-0232-4</u>

8. Beaulieu, J.C.; Reed, S.S.; Obando-Ulloa, J.M.; Boue, S.M.; Cole, M.R. Green Processing, Germinating and Wet Milling Brown Rice (*Oryza sativa*) for Beverages: Physicochemical Effects. *Foods* **2020**, *9*, 1016. <u>https://doi.org/10.3390/foods9081016</u>

9. Huang, H., & Wang, X. (2019). Acrylamide intake and endometrial cancer risk: A meta-analysis. *Int. J. Clin. Exp. Med*, *12*, 11018-11026.

10. Adani, G., Filippini, T., Wise, L. A., Halldorsson, T. I., Blaha, L., & Vinceti, M. (2020). Dietary Intake of Acrylamide and Risk of Breast, Endometrial, and Ovarian Cancers: A Systematic Review and Dose-Response Meta-analysis. *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology, 29*(6), 1095–1106. <u>https://doi.org/10.1158/1055-9965.EPI-19-1628</u>

11. Je Y. (2015). Dietary acrylamide intake and risk of endometrial cancer in prospective cohort studies. *Archives of gynecology and obstetrics*, *291*(6), 1395–1401. <u>https://doi.org/10.1007/s00404-014-3595-8</u>

12. Dearfield, K. L., Abernathy, C. O., Ottley, M. S., Brantner, J. H., & Hayes, P. F. (1988). Acrylamide: its metabolism, developmental and reproductive effects, genotoxicity, and carcinogenicity. *Mutation research*, *195*(1), 45–77. https://doi.org/10.1016/0165-1110(88)90015-2

16. Carbohydrates and fats should always be eaten inversely to one another.

The body utilizes two major energy sources, carbohydrates and fats. When large amounts of both energy sources are consumed at once, the body is more likely to store the excess available energy as fat. Research has also shown that consuming fats and carbohydrates together may trigger certain reward or pleasure centers in the brain that could lead to overeating. Therefore, a meal should either be high in fat and low in carbohydrates, or high in carbohydrates and low in fat, but never both at the same time.

In this diet, for the most part, you will be following a low carbohydrate diet (ketogenic diet), especially in the beginning. The body stores carbohydrates in the form of muscle and liver glycogen and fats in the form of triglycerides. A low carbohydrate diet will deplete muscle and liver glycogen supplies, which can lead to enhanced lipolysis (the breakdown of triglycerides for energy), and reductions in body fat. You will eventually be incorporating carbohydrates back into your diet at specific times. This is known are carb cycling or carb reloading. On days when you add more carbohydrates back into your diet, you should be consuming less fat. Hopefully this concept now makes sense to you. We'll get more into how you will be carb cycling in the "Dietary Guidelines" section.

Resources:

1. Leaf, A., & Antonio, J. (2017). The Effects of Overfeeding on Body Composition: The Role of Macronutrient Composition - A Narrative Review. *International journal of exercise science*, *10*(8), 1275–1296. <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5786199/</u>

2. DiFeliceantonio, A. G., Coppin, G., Rigoux, L., Edwin Thanarajah, S., Dagher, A., Tittgemeyer, M., & Small, D. M. (2018). Supra-Additive Effects of Combining Fat and Carbohydrate on Food Reward. *Cell metabolism*, *28*(1), 33–44.e3. <u>https://doi.org/10.1016/j.cmet.2018.05.018</u>

3. Chung N. (2023). Impact of the ketogenic diet on body fat, muscle mass, and exercise performance: a review. *Physical activity and nutrition*, *27*(4), 1–7. https://doi.org/10.20463/pan.2023.0031

17. When Carbohydrate Reloading: Eat the Majority of Your Carbohydrates After Exercise.

This is a great tip for diabetics, people showing insulin resistance, people over 50, and anybody who wants to lose weight. Exercise has been shown to decrease insulin resistance, promote better absorption and utilization of carbohydrates. Our bodies store carbohydrates in the liver and muscles in the form of a starch known as glycogen. When we exercise, liver and muscle glycogen levels become depleted, which allows for better absorption and utilization of carbohydrates after exercise. Even when carb reloading, carbs should still be moderated or completely eliminated in the morning and opt for a meal higher in protein, fat. Moderating carbs in the morning will help to promote better insulin and blood sugar levels throughout the day. We'll get more into carbohydrate reloading strategies in the, "Dietary Guidelines" section.

Don't get me wrong: I'm not telling you that you should purposely go out of your way to eat as much carbs as you can after exercise. I'm saying it's better to eat the majority of the carbs you plan to eat for that day (as in when you're carbohydrate reloading), in the next meal or two, after you exercise.

18. Stop Eating at 80-85% Full.

This is a great tip for people who are trying to lose weight, increase longevity, and keep their metabolism revved high. Instead of eating until you are completely full, finish eating when you feel 80-85% full, this way you won't end up over eating or feeling guilty, and it gives our digestive system a break from working too hard. This tip may not be as useful for someone who wants to gain weight but it's never really a good idea to eat until you feel like you're going to pop.

19. Chew Your Food Thoroughly.

The process of digestion begins in the mouth when you start chewing your food and mixing it with your saliva; It actually begins when you start thinking about eating the food, initiating the digestive processes in your belly, but let's not get too technical here. We have certain enzymes in our saliva that aid in digestion and it's like putting our own signature digestive tag on our food and water so we can better digest it. Thoroughly chewing your food and mixing it with your saliva is a very important process to digestion and most people are not chewing their food nearly enough!

The food should be chewed into a nice puree, like baby food. Swallowing whole chunks of food is very harsh on the digestive system and it also allows parasites and pathogens a place to hide from your stomach acid. These pathogens and parasites are then more likely to survive and cause harm. Think of trying to run up a hill while boulders are being thrown at you, that's what you're doing to your digestive system when you don't thoroughly chew your food. How many times should you chew? At least 30-35. How many times are you probably chewing? 5-10 times. You weren't even close ;)

Remember, be grateful that you have food on your plate and a body to eat it with, enough said.

CHANGE YOUR PERSPECTIVE - CHANGE YOUR LIFE

If you haven't figured it out already, this is an elimination diet. Meaning, you will be eliminating many foods from your diet that could be causing you harm. This is an important part of the healing process. Try not to view the diet from the perspective of, "I'm hardly allowed to eat anything on this diet!" Rather, we recommend you view it from the perspective of, "I'm following a very simple diet so that my body can better heal." Remember, almost everything comes down to perspective.

A FEW MORE IMPORTANT NOTES

Coffee and Tea:

Generally, we recommend organic matcha green tea powder over coffee due to its high antioxidant content, specifically the catechins, and lower overall caffeine content. Additionally, studies have shown that green tea may help to prevent cancer, cardiovascular disease, arthritis and reduce risk of kidney stones. Non-organically grown Coffee is a crop that is heavily sprayed with pesticides and has been known to contain heavy metals. In addition, both coffee and tea have been known to contain fairly high concentrations of mycotoxins (You can read more about the dangers of mycotoxins below). Compared to other teas and coffee, matcha green tea is generally lowest in mycotoxins.

We understand that some people love their morning cup of coffee, we don't want to take that away from you if you feel you absolutely need to have it. The good news is that some manufactures, usually higher quality organic teas and coffees, are now testing the heavy metal/ mycotoxin content in their products and revealing the results to consumers.

Herbal teas have also become very popular in wellness communities. Unfortunately, many of the herbs used are high in oxalic acid and may cause inflammation and other issues (check out keystone 10 to read about the problems associated with oxalates). Black tea and oolong tea are also higher in oxalic acid. Therefore, we recommend you avoid black tea, oolong tea and herbal teas and stick to matcha green tea powder, coffee, and water with electrolytes. Organic white tea is low in oxalic acid also acceptable.

Here are our recommendations for drinking coffee and tea:

If you are going to drink coffee, or matcha tea, we recommend an organic brand that is proven to be low in heavy metals and mycotoxins. Further, no coffee or tea after 2pm. Since caffeine is a strong stimulant with a fairly long half life, drinking caffeine after 2pm may disrupt your sleep/ wake cycles. Resources:

1. Chacko, S. M., Thambi, P. T., Kuttan, R., & Nishigaki, I. (2010). Beneficial effects of green tea: a literature review. *Chinese medicine*, *5*, 13. https://doi.org/10.1186/1749-8546-5-13 Pakshir, K., Mirshekari, Z., Nouraei, H., Zareshahrabadi, Z., Zomorodian, K., Khodadadi, H., & Hadaegh, A. (2020). Mycotoxins Detection and Fungal Contamination in Black and Green Tea by HPLC-Based Method. *Journal of toxicology*, *2020*, 2456210. <u>https://doi.org/10.1155/2020/2456210</u> 2. Shu, X., Cai, H., Xiang, Y. B., Li, H., Lipworth, L., Miller, N. L., Zheng, W., Shu, X. O., & Hsi, R. S. (2019). Green tea intake and risk of incident kidney stones: Prospective cohort studies in middle-aged and elderly Chinese individuals. *International journal of urology : official journal of the Japanese Urological Association*, *26*(2), 241–246. https://doi.org/10.1111/iju.13849

3. Zhou, H.; Yan, Z.; Wu, A.; Liu, N. Mycotoxins in Tea ((*Camellia sinensis* (L.) Kuntze)): Contamination and Dietary Exposure Profiling in the Chinese Population. *Toxins* **2022**, *14*, 452. https://doi.org/10.3390/toxins14070452

4. Casas-Junco, P. P., Ragazzo-Sánchez, J. A., Ascencio-Valle, F. J., & Calderón-Santoyo, M. (2017). Determination of potentially mycotoxigenic fungi in coffee (*Coffea arabica* L.) from Nayarit. *Food science and biotechnology*, *27*(3), 891–898. <u>https://doi.org/10.1007/s10068-017-0288-7</u>

Mycotoxins:

When food products, such as grains, nuts, seeds, corn and coffee beans are stored, fungi can grown and proliferate. These fungi produce metabolites, or waste products, in the process known as mycotoxins. Mycotoxins have been shown to cause immunoreactivity, DNA damage, and exhibit hepatotoxic (liver damage), nephrotoxic (kidney damage), teratogenic (developmental abnormalities), and carcinogenic (cancer causing) properties in the body. If you would like to learn more about mycotoxins check out the resources below.

Resources:

1. Awuchi, C. G., Ondari, E. N., Nwozo, S., Odongo, G. A., Eseoghene, I. J., Twinomuhwezi, H., Ogbonna, C. U., Upadhyay, A. K., Adeleye, A. O., & Okpala, C. O. R. (2022). Mycotoxins' Toxicological Mechanisms Involving Humans, Livestock and Their Associated Health Concerns: A Review. *Toxins*, *14*(3), 167. <u>https://doi.org/10.3390/toxins14030167</u>

2. Pitt J. I. (2000). Toxigenic fungi: which are important?. *Medical mycology*, 38 Suppl 1, 17–22. <u>https://pubmed.ncbi.nlm.nih.gov/11204142/</u>

3. WHO Mycotoxins. 2018. [(accessed on 1 May 2024)]. Available online: <u>https://www.who.int/news-room/fact-sheets/detail/mycotoxins</u>

4. Bulgaru C.V., Marin D.E., Pistol G.C., Taranu I. Zearalenone and the Immune Response. *Toxins*. 2021;13:248. doi: 10.3390/toxins13040248. [PMC free article] [PubMed] [CrossRef] [Google Scholar]

Counting Calories:

A calorie is simply a unit of energy.

A small calorie (c) is defined as the amount of energy required to raise the temperature of 1 gram of water by 1 degree Celsius. While a large calorie (kcal) is the amount of energy required to raise the temperature of 1 kilogram of water by 1 degree Celsius. 1 kcal is equal to 1,000 small calories. This is the measurement you would find on a food label, the larger calories (kcals).

People tend to get caught up in "counting calories", as if it is a way to attain a healthy fit body. We'll let you in on a little secret, it's almost impossible to count calories. The calorie amounts that you read on the food labels are based on averages, they are not exact amounts. In fact, the FDA states estimates that calorie amounts can be off by 20%! That means the foods you are consuming may contain up to 20% more or less calories than you thought. That's a calorie window of 40%!

The only way to truly count the calories you are eating would be with a bomb calorimeter, which is a device that measures calorie content through heat combustion. Except, in order to measure the calorie content, you have to burn the food in the bomb calorimeter. This would render the food inedible. Once again, counting calories is nearly impossible.

We'll let you in on another secret, when you eat high quality organic foods such as grass-fed meats and dairy with fruits and vegetables, you don't have to count calories!

Rather than counting calories, we recommend that you count chemicals. Meaning, avoid processed and non-organic foods because they are high in food additives, pesticides and heavy metals, which are all known to cause hormonal issues, inflammation, weight gain, cancer and cardiovascular disease (CVD)!

Exercise:

It's probably no surprise to you that exercise should be a part of any health and weight loss plan. Almost any form of exercise will provide benefits. We recommend a combination of resistance training (lifting weights, resistance bands, calisthenics or body weight training) and cardiovascular exercise (walking, running, rowing, swimming, elliptical etc).

Resistance training is one of the best forms of exercise for preserving, or even increasing, bone density, strength and muscle mass. Thus, resistance training plays an important role in the prevention of osteoporosis and age associated loss of muscle

mass. Generally, you should exercise at least 3-4 days a week, but no more than 5 days a week. We recommend resistance training at least 2-3 days a week, and 1-2 days of cardiovascular training a week.

A word of caution, prolonged or excessive cardiovascular training tends to elevate cortisol to significantly higher levels, compared to resistance training at similar intensities. Therefore, we recommend no more than 30 minutes of cardiovascular training per bout of exercise. Interval training, as in going back and forth from low intensity to high intensity in several repeated intervals, has been shown to improve cardiovascular/ respiratory efficiency, body fat loss, metabolism and cognitive function. We recommend keeping your interval training bouts to a maximum of 20-25 minutes to avoid excessive cortisol production. Light cardio work in a fasted state, such as going for a brisk walk in the morning before breakfast, is a great way to decrease body fat.

Resources:

1. Torres, R., Koutakis, P., & Forsse, J. (2021). The effects of different exercise intensities and modalities on cortisol production in healthy individuals: A Review. *Journal of Exercise and Nutrition*, *4*(4). https://doi.org/10.53520/jen2021.103108

2. Hong, A. R., Hong, S. M., & Shin, Y. A. (2014). Effects of resistance training on muscle strength, endurance, and motor unit according to ciliary neurotrophic factor polymorphism in male college students. *Journal of sports science & medicine*, *13*(3), 680–688.

3. Layne, J. E., & Nelson, M. E. (1999). The effects of progressive resistance training on bone density: a review. *Medicine and science in sports and exercise*, *31*(1), 25–30. <u>https://doi.org/10.1097/00005768-199901000-00006</u>

4. Atakan, M. M., Li, Y., Koşar, Ş. N., Turnagöl, H. H., & Yan, X. (2021). Evidence-Based Effects of High-Intensity Interval Training on Exercise Capacity and Health: A Review with Historical Perspective. *International journal of environmental research and public health*, *18*(13), 7201. <u>https://doi.org/10.3390/</u> jjerph18137201

Ways To Increase Body Fat Loss:

Keep in mind that this whole nutrition plan is designed to help decrease body fat. However, if you feel you aren't losing enough body fat, there are a couple of ways you can increase the rate of body fat loss. In order to increase your rate of body fat loss, you will need to create more of a caloric deficit. This means you would be burning more calories than you are consuming.

The first way is through exercise, which was mentioned above. Follow the guidelines for exercise above and that should be very helpful.

The second way is to restrict your portions of fat and snacks, but not protein. In order to do this you would slightly decrease the amount, or serving size, of healthy fats (from the recommended healthy fats list) with each meal, or carbohydrates (if carbohydrate reloading), as well as snacks with your meal, such as yogurt or berries. Remember, snacks should not be eaten between meals, rather they should be eaten with meals. In addition, you can restrict the amount of berries you are consuming from week 3 and on. You don't need to restrict your portions of other low glycemic fruits/ vegetables. Keep in mind this portion restriction should only be temporary. As in once you reach your desired body fat, you can increase your portion sizes back to the original portion size.

Cold showers and cold plunges may also help to improve body fat loss. This supposedly takes place through the activation of brown fat, which is considered a more metabolically active type of fat, and the release of hormone called, "adiponectin." Adiponectin is a hormone produced by adipose tissue (fat cells) that is released in greater amounts from cold exposure. This hormone may play an important role in preventing insulin resistance and regulating blood sugar. The good news is you don't need to go crazy with your cold exposure. All you need is 2-3 minutes of exposure to a temperature below 60 degrees.

Again, you should not restrict your protein intake (from the recommended proteins list). Protein is an important anabolic/ metabolic macronutrient that is crucial for growth/ repair and increasing metabolic rate. Studies have shown that higher protein intakes were correlated with increased body fat loss.

Resources:

1. Evans, E. M., Mojtahedi, M. C., Thorpe, M. P., Valentine, R. J., Kris-Etherton, P. M., & Layman, D. K. (2012). Effects of protein intake and gender on body composition changes: a randomized clinical weight loss trial. *Nutrition & metabolism*, *9*(1), 55. <u>https://doi.org/10.1186/1743-7075-9-55</u>

2. Ravussin, Y., Xiao, C., Gavrilova, O., & Reitman, M. L. (2014). Effect of intermittent cold exposure on brown fat activation, obesity, and energy homeostasis in mice. PloS one, 9(1), e85876. https://doi.org/10.1371/journal.pone.0085876

3. Esperland, D., de Weerd, L., & Mercer, J. B. (2022). Health effects of voluntary exposure to cold water - a continuing subject of debate. *International journal of circumpolar health*, *81*(1), 2111789. https://doi.org/10.1080/22423982.2022.2111789

Supplements:

Generally, we don't recommend taking supplements while you are on this diet, except for maybe collagen peptides and whey protein (If you consider them supplements). Supplements can be a blessing, or they can be a curse. By that we mean, some of the supplements people take can be helpful for increasing energy, boosting the immune system etc., and some supplements can be harmful.

There are several reasons why supplements could be harming you:

1. The supplement ingredients could be low quality.

2. Supplements commonly contain hidden chemicals such as fillers, binders and preservatives.

3. You could be sensitive/ allergic to any of the ingredients in the supplement.

4. Supplements commonly contain contaminants such as heavy metals, mold, bacteria, dust, and rat urine/ feces!

5. Supplements can also contain hidden ingredients not listed on the label.

Indeed, studies have revealed that some supplements contained levels of contaminants that exceeded the recommended daily limit for heavy metals, such as arsenic, lead, cadmium and mercury, as well as fungal/ bacterial contaminants. Studies have also found these same contaminants in common pharmaceutical products. To learn more about the dangerous contaminants found in supplements and pharmaceutical products, check out the resources below.

The problem is that the FDA hasn't reviewed and approved most of the supplements on the market. This even includes supplements from companies boasting higher quality ingredients. This is not to say that you shouldn't strive for supplements with higher quality ingredients, of course you should. The truth is, unless an independent party has reviewed the supplements to ensure that they are good quality and scientifically tested for any potential contaminants, the quality of the supplement remains unknown. Some supplement companies are taking a step in the right direction by having their supplements tested by independent labs and posting the results of the tests.

The good news is you that you don't have to take any supplements while following this diet plan. The reason is because the variety of super food choices we recommend in the program are loaded with vitamins, minerals, antioxidants, and other nutrients that will be more than enough to take your health to the next level. There is one detox supplement we recommend and you can read about that below.

The one detox supplement we recommend with this diet plan:

There is one detox supplement we recommend to enhance your results with this diet plan, and that supplement is zeolite. The reason we are recommending this supplement is because we feel that heavy metals are major problem in our society today. There is an overwhelming amount of research linking heavy metal contamination to Prostate, Upper GI, Gastric, Colon, Lung, Kidney, Breast, Skin and Nasopharyngeal Cancer (You can read more about that in the resources). What's even more interesting; according to the National Cancer Institute, breast, lung and bronchus, prostate, and colorectal cancers account for almost 50% of all new cancer cases in the United States.

Zeolite Clinoptilolite consists of microporous crystals that are highly adsorbent to heavy metals and a wide array of toxins. Zeolite also works through ion exhchange, which means it will trade a mineral such as a calcium ion for a heavy metal such as lead. For this reason, many people consider zeolite to be a detox superstar.

Unfortunately, some brands of zeolite may actually contain heavy metals themselves, which is obviously counterintuitive. That's why we recommend the detox combo pack from touchstone essentials, which has been tested and proven to be low in heavy metals. If you have another zeolite supplement that you know is safe and effective, that works as well.

If you are considering taking other supplements, here are our recommendations:

You should only add in one supplement at a time, one week at a time. We don't recommend adding multiple supplements into your routine at once. The reason is that you could be sensitive/ allergic to one or all of the supplements you just added in. If this is the case, you won't be able to recognize which supplements are good, and which ones are bad. Our advice is to limit your supplement intake to the absolute minimum, only add in one supplement at a time, and wait at least a week to see how you feel.

Pay attention for signs or symptoms of sensitivity. Here are some signs and symptoms that could indicate a problem: digestive distress, such as gas, bloating, constipation, diarrhea, indigestion, or other symptoms, such as headache, body aches, sinus congestion, irritability, fatigue etc. If you do have any of these symptoms arising after you start a new supplement, stop taking the supplement immediately and see if the symptoms disappear.

Take periodic breaks from all supplements. You should never take a supplement for more than 2 or 3 months straight. It's good to give your body a break from supplements and see how you feel without them. We recommend taking at least 2 weeks off every 2 or 3 months from all supplements to give your body a break and see how you feel.

Resources:

1. Commissioner, O. of the. (2017, August 11). FDA warns of potential contamination in multiple brands of drugs, dietary supplements. U.S. Food and Drug Administration. <u>https://www.fda.gov/</u> <u>news-events/press-announcements/fda-warns-potential-contamination-multiple-brandsdrugs-dietary-supplements</u>

2. Genuis, S. J., Schwalfenberg, G., Siy, A. K., & Rodushkin, I. (2012). Toxic element contamination of natural health products and pharmaceutical preparations. *PloS one*, *7*(11), e49676. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0049676

- 3. White, C. M. (2020, February 19). *Analysis: Some natural supplements can be dangerously contaminated*. PBS. <u>https://www.pbs.org/newshour/health/analysis-some-natural-supplements-can-be-dangerously-contaminated</u>
- 4. *Common cancer sites cancer stat facts*. SEER. (n.d.). https://seer.cancer.gov/statfacts/html/ common.html#:~:text=Breast%2C%20lung%20and%20bronchus%2C%20prostate,nearly%2050 %25%20of%20all%20deaths.

5. Kim, H. S., Kim, Y. J., & Seo, Y. R. (2015). An Overview of Carcinogenic Heavy Metal: Molecular Toxicity Mechanism and Prevention. *Journal of cancer prevention*, *20*(4), 232–240. https://doi.org/ 10.15430/JCP.2015.20.4.232

6. Yuan, W., Yang, N., & Li, X. (2016). Advances in Understanding How Heavy Metal Pollution Triggers Gastric Cancer. *BioMed research international*, *2016*, 7825432. <u>https://doi.org/10.1155/2016/7825432</u>

7. Bonfiglio, R., Sisto, R., Casciardi, S., Palumbo, V., Scioli, M. P., Palumbo, A., Trivigno, D., Giacobbi, E., Servadei, F., Melino, G., Mauriello, A., & Scimeca, M. (2024). The impact of toxic metal bioaccumulation on colorectal cancer: Unravelling the unexplored connection. *The Science of the total environment, 906*, 167667. https://doi.org/10.1016/j.scitotenv.2023.167667

8. Gunduz O., Bakar C., Simsek C., Baba A., Elci A., Gurleyuk H., Mutlu M., and Cakir A., Statistical analysis of causes of death (2005–2010) in villages of Simav Plain, Turkey, with high arsenic levels in drinking water supplies, Archives of Environmental & Occupational Health. (2015) 70, no. 1, 35–46, https://doi.org/10.1080/19338244.2013.872076

9. Gunduz O., Simsek C., and Hasozbek A., Arsenic pollution in the groundwater of Simav Plain, Turkey: its impact on water quality and human health, Water, Air, and Soil Pollution. (2010) 205, no. 1–4, 43–62, https://doi.org/10.1007/s11270-009-0055-3, 2-s2.0-75049085531.

10. Eskandari O., Ghias M., Fatehizadeh A., Zare M., Amin M., and Kazemi A., Geographical distribution of stomach cancer related to heavy metals in Kurdistan, Iran, International Journal of Environmental Health Engineering. (2015) 4, no. 1, https://doi.org/10.4103/2277-9183.157700.

11. Welling R., Beaumont J. J., Petersen S. J., Alexeeff G. V., and Steinmaus C., Chromium VI and stomach cancer: a meta-analysis of the current epidemiological evidence, Occupational and Environmental Medicine. (2015) 72, no. 2, 151–159, https://doi.org/10.1136/oemed-2014-102178, 2-s2.0-84920747202.

12. Núñez O., Fernández-Navarro P., Martín-Méndez I., Bel-Lan A., Locutura J. F., and López-Abente G., Arsenic and chromium topsoil levels and cancer mortality in Spain, Environmental Science and Pollution Research. (2016) 23, no. 17, 17664–17675, https://doi.org/10.1007/s11356-016-6806-y.

13. Rousseau M.-C., Parent M.-E., Nadon L., Latreille B., and Siemiatycki J., Occupational exposure to lead compounds and risk of cancer among men: a population-based case-control study, American Journal of Epidemiology. (2007) 166, no. 9, 1005–1014, https://doi.org/10.1093/aje/kwm183, 2-s2.0-35348883685.

14. Wroblewski L. E., PeekR. M.Jr., and Wilson K. T., Helicobacter pylori and gastric cancer: factors that modulate disease risk, Clinical Microbiology Reviews. (2010) 23, no. 4, 713–739, https://doi.org/10.1128/cmr.00011-10, 2-s2.0-78049354889.

15. Ostadrahimi A., Payahoo L., Somi M. H., and Khajebishak Y., The association between urinary cadmium levels and dietary habits with risk of gastrointestinal cancer in Tabriz, Northwest of Iran, Biological Trace Element Research. (2016) https://doi.org/10.1007/s12011-016-0764-6.

16. Türkdoğan M. K., Kilicel F., Kara K., Tuncer I., and Uygan I., Heavy metals in soil, vegetables and fruits in the endemic upper gastrointestinal cancer region of Turkey, Environmental Toxicology and Pharmacology. (2003) 13, no. 3, 175–179, https://doi.org/10.1016/s1382-6689(02)00156-4, 2-s2.0-0037381563.

17. Zhao Q., Wang Y., Cao Y., Chen A., Ren M., Ge Y., Yu Z., Wan S., Hu A., Bo Q., Ruan L., Chen H., Qin S., Chen W., Hu C., Tao F., Xu D., Xu J., Wen L., and Li L., Potential health risks of heavy metals in cultivated topsoil and grain, including correlations with human primary liver, lung and gastric cancer, in Anhui province, Eastern China, The Science of the Total Environment. (2014) 470-471, 340–347, https://doi.org/10.1016/j.scitotenv.2013.09.086, 2-s2.0-84886002077.

Wu, H., Wang, M., Raman, J. D., & McDonald, A. C. (2021). Association between urinary arsenic, blood cadmium, blood lead, and blood mercury levels and serum prostate-specific antigen in a population-based cohort of men in the United States. *PloS one*, *16*(4), e0250744. <u>https://doi.org/10.1371/journal.pone.0250744</u>

MetaAnalysis- Heavy Metals Linked to tumor formation:

Coradduzza, D., Congiargiu, A., Azara, E., Mammani, I. M. A., De Miglio, M. R., Zinellu, A., Carru, C., & Medici, S. (2024). Heavy metals in biological samples of cancer patients: a systematic literature review. *Biometals : an international journal on the role of metal ions in biology, biochemistry, and medicine, 37*(4), 803–817. https://doi.org/10.1007/s10534-024-00583-4

DIETARY GUIDELINES:

A General Layout of How to Follow This program:

First, we will establish the timeline layout, as in what strategies you will be following for weeks 1-2, 3-4 etc. Once you understand the strategies and the timeline layout, you can check the food lists we've provided, including the recommended food lists and foods to avoid list. For best results, we recommend you adhere strictly to the recommended foods lists and don't stray.

You will find the food lists in the next section. After the food lists section, we provide examples of what a meal should look like and general advice on what serving sizes are most likely appropriate for you. Once you understand and have integrated the information, choose foods from the food lists, start putting your meals together with the appropriate portion sizes, and follow the guidelines from the timeline layout. We have also included fasting strategies in the timeline layout for your convenience.

Remember to Keep It Simple (That's what I'm doing here)

<u>A Meal Consists of</u>: A Protein, A Healthy Fat and A Green Vegetable or Low Glycemic Fruit

Strive For 2-3 Meals A Day

Make sure your food is ORGANIC

THE TIMELINE LAYOUT

There are two ways you can start this nutrition plan:

The first way involves a transition period of 2 weeks that allows you to slowly decrease your carbohydrate intake and progress into a ketogenic diet in a more gentle way. This way may be more appropriate for individuals who have never followed a low carb diet, or are in the early stages of improving their diet. If you would like to start with the transition period, see the category labeled, "Transition Period," and start there.

The second way involves going directly into an extremely low carb diet (a ketogenic diet), rather than transitioning. This way is more appropriate for people who have followed a low carb diet in the past, and feel ready to jump right into an extremely low carb diet. If you feel ready, you can start at, "Weeks 1-2," where you will be entering ketosis.

Transition Period

The transition period will be a two week period where you will be slowly decreasing your intake of carbohydrates, while simultaneously increasing your fat intake. Remember from keystone15, carbs and fats should be eaten inversely to one another. This means as you are slowly reducing the amount of carbohydrates you are eating over a two week period, you will also be increasing your intake of fat proportionally. Explicit instructions on how to transition over a two week period are given below.

2 Week Transition Period:

For days 1-4, you can start with 3 servings of carbohydrates per day, which means one serving of carbohydrates per meal. In order to build your meals for days 1-4, you will be selecting from the food lists offered in the,

"Food Lists" section. The food lists section can be found after the timeline layout. From the food lists, you can select:

<u>A Protein:</u> You can select any of the proteins from the, "Recommended: Proteins," list. This will be your primary protein for the meal.

<u>A Healthy Fat:</u> You should **only have 2-3 servings of fat for the <u>day, or 1</u> <u>small serving per meal,</u> from the, "Recommended Healthy Fats," list.**

<u>A Low Glycemic Vegetable or Fruit:</u> You can select one low glycemic vegetable or fruit per meal from the, "Recommended: Low Glycemic Vegetables and Fruits Low in Oxalic Acid and Other Anti-nutrients," list under the heading "Weeks 1-2."

<u>Super Food Add Ons:</u> You can also add on any of the super foods to your meal, except honey. Honey is only recommended after week 4, when you will begin carbohydrate reloading. For example, you can add sugar free whole yogurt with bee pollen and cinnamon to your meal. Remember, we don't recommend snacking between meals.

<u>A Carbohydrate:</u> You can have 1 serving of any of the higher glycemic carbohydrates in the, "Carbohydrates For Carb Reloading," list per meal.

For days 5-10, you should lower your carbohydrate intake to 2 servings of carbohydrates per day, which means one meal (breakfast or dinner is preferable) will be very low in carbohydrates. This will be a ketogenic meal. The guidelines for the other 2 meals that have carbohydrates will be exactly the same as the guidelines for meals for days 1-4. For the low carbohydrate meal (the ketogenic meal), you can select:

<u>A Protein:</u> You can select any of the proteins from the, "Recommended: Proteins," list. This will be your primary protein for the meal.

<u>A Healthy Fat:</u> You can select 1-2 servings of any fat(s) per ketogenic meal from the, "Recommended Healthy Fats," list.

<u>A Low Glycemic Vegetable or Fruit:</u> You can select one low glycemic vegetable or fruit per meal from the, "Recommended: Low Glycemic

Vegetables and Fruits Low in Oxalic Acid and Other Anti-nutrients," list under the heading "Weeks 1-2."

<u>Super Food Add Ons:</u> You can also add on any of the super foods to your meal, except honey. Honey is only recommended after week 4, when you will begin carbohydrate reloading. For example, you can add sugar free whole yogurt with bee pollen and cinnamon to your meal. Remember, we don't recommend snacking between meals.

For days 11-14, you should lower your carbohydrate intake to 1 serving of carbohydrates per day, which means two meals (breakfast and dinner is preferable) will be very low in carbohydrates. The guidelines for the 1 meal containing carbohydrates (lunch is preferable) will be exactly the same as the meals for days 1-4. The guidelines for the 2 ketogenic meals (breakfast and dinner), will be exactly the same as the guidelines offered above for the ketogenic meal from days 5-10.

Once you have completed the two week transition, you can now move to, "Weeks 1-2" on the timeline layout. You should now be ready to follow a full ketogenic diet, which will consist of 3 ketogenic meals per day. Follow the guidelines below:

Weeks 1-2:

"Entering Ketosis"

In order to enter a state of ketosis, you will need to prioritize eating high quality proteins and fats, and completely avoid any "glycemic" carbohydrates. Glycemic carbohydrates are carbohydrates that will raise your blood sugar. Remember, we are trying to deprive your body of glucose so it will shift energy systems towards the production of ketones in the liver. Keep in mind that all fruits and vegetables are technically carbohydrates, even fibrous vegetables such as broccoli. The difference is that broccoli doesn't have an effect on blood sugar, therefore, broccoli is not a glycemic carbohydrate. In order to your keep blood sugar low, the only "traditional" fruits you are allowed to have are citrus fruits. We label citrus fruits as traditional fruits because technically, yellow squash, zucchini and bell peppers (all of which are foods allowed in weeks 1-2) are also fruits, but most people associate these foods as vegetables.

It's important to understand that the first 2 weeks of a ketogenic are usually the most difficult for people. When entering ketosis, the body transitions and begins to utilize fat to produce more ketones. As a result, you may experience symptoms of fatigue, grogginess, nausea, headaches etc. As mentioned in keystone 7, it's important to supplement with electrolytes to avoid extreme keto flu symptoms. These symptoms are normal and should all pass after a few weeks. If symptoms feel abnormal, extreme, or are persistent for more than a few weeks, you should consult with your doctor immediately.

Below we explain where you can find the foods you will be eating for weeks 1-2, and the lists that contain these foods. You will use these lists to build your meals.

How to build your meals for weeks 1-2:

A Protein: You can select any of the proteins from the, "Recommended: Proteins," list. This will be your primary protein for the meal.

A Healthy Fat: You can select 1-2 servings of any fat(s) per meal from the, "Recommended Healthy Fats," list.

A Low Glycemic Vegetable or Fruit: You can select one low glycemic vegetable or fruit per meal from the, "Recommended: Low Glycemic Vegetables and Fruits Low in Oxalic Acid and Other Anti-nutrients," list under the heading "Weeks 1-2."

Super Food Add Ons: You can also add on any of the super foods to your meal, except honey. Honey is only recommended after week 4, when you will begin carbohydrate reloading. For example, you can add sugar free whole yogurt with bee pollen and cinnamon to your meal. Remember, we don't recommend snacking between meals.

Citrus Fruits: 1-2 servings of citrus fruits per day are allowed during weeks 1-2. While citrus fruits are a carbohydrate, they are low glycemic since they mostly contain water. Citrus fruits are also loaded with antioxidants.

Don't worry, we go over recommended portion sizes and give more indepth examples of meal options after the Food Lists.

Weeks 3-4:

"Maintaining Ketosis"

At this point, you should definitely be in ketosis. The goal is to now maintain a ketogenic state for the next 2 weeks. Almost everything is the same as compared to weeks 1-2, except you can now have 1-2 servings of berries (a little more than a palm full) on exercise days, or every other day. Berries are pretty low glycemic so they shouldn't pose a problem for maintaining ketosis.

How to build your meals for weeks 3-4:

A Protein: You can select any of the proteins from the, "Recommended: Proteins," list. This will be your primary protein for the meal.

A Healthy Fat: You can select 1-2 servings of any fat(s) per meal from the, "Recommended Healthy Fats," list.

A Low Glycemic Vegetable or Fruit: You can select one low glycemic vegetable or fruit per meal from the, "Recommended: Low Glycemic Vegetables and Fruits Low in Oxalic Acid and Other Anti-nutrients," list under the heading "Weeks 1-2."

Super Food Add Ons: You can also add on any of the super foods to your meal, except honey. Honey is only recommended after week 4, when you will begin carbohydrate reloading. For example, you can add sugar free

whole yogurt with bee pollen and cinnamon to your meal. Remember, we don't recommend snacking between meals.

Citrus Fruits: 1-2 servings of citrus fruits per day are allowed during weeks 1-2. While citrus fruits are a carbohydrate, they are low glycemic since they mostly contain water. Citrus fruits are also loaded with antioxidants. Citrus fruits can be eaten with breakfast or lunch, but we don't recommend eating them with dinner.

Berries: You can eat berries in the morning if you exercised prior. 1-2 servings (a little more than a palm full) of berries are allowed on exercise days, after exercise, or every other day with lunch or dinner. You could also eat half a palm full with lunch and half a palm full with dinner if you'd like to split it up.

Fast 1 At the end of 4 weeks Skipping Dinner

After 4 weeks, it's time for your first fast! You will eat breakfast and lunch like you normally would, but you will skip dinner. Obviously, no food or snacks allowed after lunch, including milk. Only water with electrolytes, and white tea because it is low in caffeine, is allowed after lunch. This should be about a 20 hour fast. We will be progressing you into longer fasts by the end of the program.

Weeks 5-12:

"Introducing Carbohydrate Reloading Days"

We will now be introducing one day of carbohydrate reloading per week. You can eat 2-3 servings of higher glycemic carbohydrates on this day. Remember, carbs and fats should be eaten inversely to one another. Therefore, on days when you are carbohydrate reloading, you should be eating less fat. It is best to carbohydrate reload on an exercise day, and carbs should be eaten after exercise. The other 6 days of the week you should be eating exactly like you were in weeks 3-4. Fast 2 will take place after week 8, and fast 3 will take place after week 12. You can find the guidelines for fast 2 and 3 after the guidelines for meal setup for weeks 5-12.

How to build your meals for weeks 5-12 On Non-Carbohydrate Reloading days: As in the other 6 days. It is the same as weeks 3-4

A Protein: You can select any of the proteins from the, "Recommended: Proteins," list. This will be your primary protein for the meal.

A Healthy Fat: You can select 1-2 servings of any fat(s) per meal from the, "Recommended Healthy Fats," list.

A Low Glycemic Vegetable or Fruit: You can select one low glycemic vegetable or fruit per meal from the, "Recommended: Low Glycemic Vegetables and Fruits Low in Oxalic Acid and Other Anti-nutrients," list under the heading "Weeks 1-2."

Super Food Add Ons: You can also add on any of the super foods to your meal, except honey. Honey is only recommended after week 4, when you will begin carbohydrate reloading. For example, you can add sugar free whole yogurt with bee pollen and cinnamon to your meal. Remember, we don't recommend snacking between meals.

Citrus Fruits: 1-2 servings of citrus fruits per day are allowed during weeks 1-2. While citrus fruits are a carbohydrate, they are low glycemic since they mostly contain water. Citrus fruits are also loaded with antioxidants. Citrus fruits can be eaten with breakfast or lunch, but we don't recommend eating them with dinner.

Berries: You can eat berries in the morning if you exercised prior. 1-2 servings (a little more than a palm full) of berries are allowed on exercise days, after exercise, or every other day with lunch or dinner. You could also

eat half a palm full with lunch and half a palm full with dinner if you'd like to split it up.

How to build your meals for weeks 5-12 On Carbohydrate Reloading days: As in the 1 day a week where you will be eating carbs.

A Protein: You can select any of the proteins from the, "Recommended: Proteins," list. This will be your primary protein for the meal.

A Healthy Fat: You should **only have 2-3 servings of fat for the <u>day</u>** from the, "Recommended Healthy Fats," list. The non- carbohydrate reloading meals allowed for 1-2 servings <u>per meal</u>, when carbohydrate reloading, only 2-3 servings of fat <u>per day</u> are recommended.

A Low Glycemic Vegetable or Fruit: You can select one low glycemic vegetable or fruit per meal from the, "Recommended: Low Glycemic Vegetables and Fruits Low in Oxalic Acid and Other Anti-nutrients," list under the heading "Weeks 1-2."

Super Food Add Ons: You can also add on any of the super foods to your meal, except honey. Honey is only recommended after week 4, when you will begin carbohydrate reloading. For example, you can add sugar free whole yogurt with bee pollen and cinnamon to your meal. Remember, we don't recommend snacking between meals.

Carbohydrates for Carb Reloading Days: You can have 2-3 servings of any of the higher glycemic carbohydrates in the, "Carbohydrates For Carb Reloading," list per carb reloading day. Remember, it's best to eat carbs after you've exercised.

Fast 2 At the end of week 8 Skipping Lunch and Dinner

After 8 weeks, it's time for fast 2. You will eat breakfast like you normally would, but you will skip lunch and dinner. Obviously, no food or snacks allowed after breakfast, including milk. You can drink your coffee or matcha tea in the morning. Only water with electrolytes, and white tea because it is low in caffeine, is allowed in the afternoon. This should be about a 24 hour fast.

Fast 3 At the end of week 12

Skipping Breakfast, Lunch and Dinner

After 12 weeks, it's time for fast 3. You will be skipping breakfast, lunch and dinner. Therefore, you will not be eating for that day. Obviously, no food or snacks allowed for the whole day, including milk. You can drink your coffee or matcha tea in the morning but with no additives, such as milk, butter, cream etc. Only water with electrolytes, and white tea because it is low in caffeine, is allowed in the afternoon. This should be about a 40 hour fast.

Guidelines For Week 12 and On:

After 12 weeks, we have some choices for you on how you can proceed:

Choice 1: You can choose to continue the diet with carbohydrate reloading days, as in 1 day a week of carbohydrate loading. This is what you were doing from week 4 on.

Choice 2: You can restart the whole process, as in from week 1 on. This would would mean that you're going back to strictly low carb and progressing back into carbs.

Choice 3: You can work in moderate carbohydrate reloading (carb cycling) on workout days. If you choose to do carb cycling on workout days, this means you can have a meal with high glycemic carbs only on exercise days, after you exercise.

The choice is yours.

Choose Wisely

(Said in the voice like the grail knight from Indiana Jones: The Last Crusade).

FOOD LISTS

Below are our recommended food lists and our foods to avoid list. To ensure success, we strongly recommend that you stick to the recommended food lists and don't stray.

Recommended Low Glycemic Vegetables and Fruits Low in Oxalic Acid and Other Anti-nutrients:

Here is a list of vegetables and fruits that are low in oxalic acid, low in carbs and high in antioxidants. These vegetables can be consumed in greater amounts:

Weeks 1-2:

Broccoli	Mushrooms	Broccoli Rabe
Green Beans	Cabbage	Colored Bell Peppers (Not Green)
Zucchini	Artichokes	Cilantro
Yellow Squash	Romaine Lettuce	
Cucumbers	Arugula	

Citrus Fruits- Lemons, oranges, limes, grapefruit etc.

Weeks 3-4 and On:

All Foods from weeks 1-2 can be eaten, as well as:

Berries- blackberries, blueberries, strawberries (Not Raspberries)

Note: Blackberries are technically considered a high FODMAP food, due to their high sorbitol content. However, they have a high antioxidant content and may provide health benefits. Therefore, if you feel fine when you eat blackberries, you can continue to eat them.

Note: broccoli, broccoli rabe, bok choy, cabbage and arugula are all cruciferous vegetables. Cruciferous vegetables can interfere with thyroid function. People with thyroid conditions or people who are prone to thyroid conditions should moderate these vegetables to only 1 serving a day and 3-4 servings a week total. People with normal thyroid function can consume 1-2 servings a day and no more than 5-6 servings in a week.

<u>Avoid</u>

Foods To Avoid That Are High in Oxalic Acid, Lectins, Phytoestrogens, or Other Anti-Nutrients That Cause Inflammation

You will see that many of these foods have been touted as super foods. Eating Large quantities of foods high in oxalic acid and other anti-nutrients has been linked to: Kidney Stones, Inflammation, Arthritis, Gastro-intestinal Issues such as IBS, Weight Gain, Lethargy and possible links to Auto Immune Diseases. Remember, this doesn't mean you can't ever consume these foods again but they should be completely avoided for the first 3 or 4 months to reduce inflammation, restore gut health and optimize your overall heath. I would recommend adding no more than 2-3 servings a week of foods high in oxalic acid and no more than 1 serving a day. Steaming foods has been shown to reduce the oxalic acid level but that doesn't mean you can eat as much as you want as long as you steam it. They should still be moderated.

Kale	Spinach	Cacao	Turmeric	Ashwagandha
Swiss Chard	Tomatoes	Chocolate	Dandelion R	oot/ Greens
Potatoes	Green Peppers	Cocoa	Figs	Soy
Beet Greens	Asparagus	Rhubarb	Flax Seeds	
Egg Plant	Mustard Greens	Cashews	Chia Seeds	
Cranberries	Sunflower Seeds	Raspberries	Almonds	

Note: All nuts and seeds should generally be avoided because they are difficult to digest, may irritate the lining of the gut and cause digestive distress. They also contain phytoestrogens and SHBG, which disrupt important hormones such as testosterone and estrogen, as well as oxalic acid.

Note: While foods such as kale are technically considered low in oxalic acid and other anti nutrients, many people report digestive issues associated with kale. That's why you will see kale on the foods to avoid list.

Note: Chocolate has been pushed as a super food for many years due to its high antioxidant content but studies have shown that even organic chocolate made from cocoa and cacao are high in heavy metals, such as lead and cadmium, and oxalates. Therefore, all forms of chocolate are on the avoid list. You can reference those studies here if you like:

Resources:

Theresa Schroder, Leo Vanhanen, Geoffrey P. Savage, Oxalate content in commercially produced cocoa and dark chocolate, Journal of Food Composition and Analysis,Volume 24, Issue 7, 2011, Pages 916-922, ISSN 0889-1575, https://doi.org/10.1016/j.jfca.2011.03.008.

Consumer Reports. (2023, January). Heavy Metals in Chocolate Bars. <u>https://article.images.consumerreports.org/image/upload/v1672933163/prod/content/dam/CRO-Images-2022/Special%20Projects/Consumer Reports Test Methodology for Heavy Metals in Chocolate Bars - January 2023.pdf</u>

Recommended Grains:

To optimize your health or weight loss it's best to avoid grains, but the grains we recommend can provide some benefits when eaten appropriately. There are only 2 grains that we recommend and they are both for carbohydrate reloading days only:

Sprouted or Germinated Brown Rice

White Basmati Rice (For Carbohydrate Reloading Only- See Below in "The Recommended Carbohydrates For Carbohydrate Reloading," Section)

Recommended Proteins:

Almost all proteins are good. Make sure you rotate your proteins. The biggest concern is fish, make sure the fish is wild caught, not farm raised. Make sure the meat, eggs and dairy are organic, pasture raised, grass-fed etc. Avoid large fish (Tuna, Swordfish, Shark Etc.) all together due to high mercury, lead, cadmium etc.

Organ Meats- Liver, Kidney, Heart etc.	Elk	Lamb
Grass-fed Beef	Caribou	Goat
Pasture Raised Organic Chicken	Venison	Turkey
Rabbit	Eggs	-
Grass-fed Whey Protein		

Eat The Foods Below Sparingly (1-2 x a week):

Pork

Wild Caught Salmon, Oysters, Clams, Mussels Scallops, Wild Caught Sardines, Mackerel, Cod

Recommended Carbohydrates For Carb Reloading (After First 4 Weeks):

It's better to think of carbs as a supplement rather than a necessity at each meal. It's best to consume your carbs for the day, after you've exercised. Try not to consume carbs late at night. Remember, fruit is a carb and excess carbohydrate consumption (even fruit) is one of the biggest causes of weight gain. In colder climates, the only fruits that should be consumed in the winter are squash, peppers, zucchini berries, and maybe warm lemon tea, any other fruit is out of season. In warmer climates, most fruits are in season during the winter months and can be consumed regularly.

Raw Honey- 1 tbsp Fruits- banana, cherries, papaya, pineapple, mango, watermelon Sprouted Brown Rice or White Rice Butternut Squash Spaghetti Squash Acorn squash

Recommended Healthy Fats:

Most people aren't eating enough healthy fats in their diet. Strive for a healthy fat with each meal.

Extra Virgin Olive Oil	Whole Coconut Butter (manna)	
Grass-Fed Butter	Avocado	
Egg Yolks	Sour Cream	
Fresh Cream	Beef Tallow, Lard and Ghee	

Fats For Cooking: Frying- Beef Tallow, Lard, Ghee Light simmering and Baking: Olive Oil and Coconut Oil

Recommended Super Foods:

Think of these foods as healthy supplements to your diet.

Bone Broth	Bee Pollen	Cilantro
Apple Cider Vinegar	Collagen Peptides	
Raw Honey	Raw Cinnamon	
Raw Grass-Fed Milk	Grass-Fed Kefir	
Liver & Other Organs	Grass-Fed Whole Y	ogurt (Sugar Free)
Matcha Green Tea Powder	Colostrum	

Note: While cilantro is considered a super food by many, some people have a genetic trait that makes cilantro taste soapy or foul to them. If cilantro tastes soapy to you, you most likely have this trait and should probably avoid cilantro.

Resource:

Eriksson, N., Wu, S., Do, C. B., Kiefer, A. K., Tung, J. Y., Mountain, J. L., Hinds, D. A., & Francke, U. (2012). A genetic variant near olfactory receptor genes influences cilantro preference. *Flavour*, 1(1). https://doi.org/10.1186/2044-7248-1-22

If you stick to the foods and recommendations we've listed above, you shall be happy, healthy and fit :)

Example Meals and Recommended Portion Sizes

In this section, we offer some examples of what your meals should look like, and what portion sizes are most likely appropriate. When it comes to meals, the simpler the better.

While most people love the idea of fancy gourmet meals with lots of ingredients seasonings, creams and sauces, we recommend that you stray away from this style of meal prep. There are several reasons for this recommendation, including:

- **1.** The amount of time necessary to prepare meals like this is unrealistic for most people.
- **2.** Lofty preparation can begin to feel burdensome.
- **3.** You could be sensitive to any of the herbs, pepper and spices you are using and have no idea.
- 4. Indigestion and reflux are commonly caused by herbs, pepper and spices. In fact, we've heard of several cases where people originally suspected meat as a culprit for indigestion, but the real culprit turned out to be the preservatives, herbs, spices and sauces used to flavor the meat.
- Store bought sauces, creams and garnishes usually contain questionable ingredients. Even home-made recipes call for questionable ingredients, many of which are most likely on the foods to avoid list.

The best thing you can do is to keep your meals simple and try to avoid using pepper, herbs and spices. Stick to high quality sea salt for flavoring and you should be fine.

Below we offer example meals and recommended portion sizes for a 150 lb. person, and a 200 lb. person. We understand not everyone will be these exact weights, therefore, you should use these portion sizes as a best fit model to give you an idea of what portion sizes closest fit your needs. For example, if you are 175 lb., you should be eating portions somewhere in

between the 150 lb. and 200 lb. recommendations. As you lose weight, you can also adjust your portion sizes to better suit your needs.

Example Meal 1 (Non Carbohydrate Reloading): Breakfast

Protein Shake -10-12 oz of water whey protein or beef protein egg yolks and/or avocado bee pollen Mushroom Extracts- Reishi and/or Lion's Mane and/or Cordyceps Collagen Peptides

<u>Serving For 150 lb.</u> <u>Person</u>	<u>Serving For 200 lb.</u> <u>Person</u>
1 serving protein powder	1-2 servings protein powder
3 raw egg yolks (not raw whites) or 1 whole avocado	5-6 raw egg yolks (not raw whites) or whole avocado + 2 egg yolks
1 serving bee pollen	1 serving bee pollen
1 serving chosen mushrooms	1 serving chosen mushrooms
1 serving collagen peptides	1 serving collagen peptides

Note: Consumption of raw egg yolks is fine but you should not consume raw egg whites. Raw egg white consumption has been linked to biotin deficiency. Therefore, you should separate the raw egg yolks from the raw whites. You can cook and consume the whites separately if you like.

Example Meal 2 (Non Carbohydrate Reloading): Lunch

Skillet-fried Burger - ground meat patty (choice of protein-Beef, Elk, Venison etc...) Cooked in Beef Tallow, Lard or Ghee Low Glycemic Fruit or Vegetable (from list category) - Simmered Zucchini Quality Salt - such as Sea Salt Healthy Fat (from list category) - Avocado or Sour Cream with olive oil drizzle "Snack" to be eaten with meal - Yogurt (Weeks 1-2 may also eat citrus fruit. Weeks 3-4 may add berries)

Serving for 150 lb person	Serving for 200 lb person
1/3 lb meat patty	1/2 lb meat patty
1 cup zucchini	1 1/2 cups zucchini
1 whole avocado or Tbsp sour cream	1 whole avocado + olive oil drizzle OR 2 Tbsp sour cream
1/2 cup yogurt	3/4 cup yogurt

Example Meal 3 (Non Carbohydrate Reloading): Dinner

Skillet fried steak- Cooked in Beef Tallow, Lard or Ghee Low Glycemic Fruit or Vegetable (from list category) - Simmered Green Beans with Mushrooms Salt Coconut Butter 1 glass of Milk

Serving for 150 lb person	Serving for 200 lb person
8-10 oz steak	12-14 oz steak
1 cup green beans and mushrooms	1 1/2 cup green beans and mushrooms
1 Tbsp coconut butter	2 Tbsp coconut butter
8-10 oz whole milk	12-14 oz whole milk

Example Meal 4 (Carbohydrate Reloading):

Baked Chicken Thighs with Olive Oil drizzle

Low Glycemic Fruit or Vegetable (from list category) - Simmered or Raw Bell Peppers Sprouted Brown Rice with small amount of butter

Serving for 150 lb person	Serving for 200 lb person
3 Chicken Thighs	4-5 Chicken Thighs
1 cup peppers	1 1/2 cup peppers
1/2 cup cooked rice	3/4 cup cooked rice
1 teaspoon butter	2 teaspoons butter

FINAL WORDS

In 1903 Thomas Edison was concerned about the healthcare of his time and stated:

"The doctor of the future will give no medicine, but will interest his patient in the care of the human frame, in diet and in the cause and prevention of disease."

We would like to extend an invitation to check out our other online courses "Posture, Core and Breathwork" and "Foam Rolling - Self Myofascial Release" available from our website <u>www.wolfmoonwellness.com</u> and our online course page www.thehumanrestorationproject.com

We congratulate you on taking this step and WE BELIEVE IN YOU.

We thank you for the trust you have put in us to guide you on your journey to health and wellness.

We are living in a world where our health care systems profit from our illness. Popular culture glorifies unhealthy diet and lifestyle. Until this shifts, there will continue to be widespread disease. It is up to you to rebel and take responsibility for your health now.

Become your own researcher. Investigate the resources we have provided here in this program and on our website. Join us on instagram and facebook @wolfmoonwellness. Welcome to the Wolf Pack!

Health is the Rebellion Awakening the Revolution.

Be Well,

John and Mary Laznovsky