

Dietary Guidelines 2024



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Our Philosophy of Food

Our goal at Naturopathic Specialists is to keep you **healthy** and **strong** while you undergo your journey with cancer. One of the cornerstones of our approach to your treatment is diet. We believe that everything you put into your body has a direct effect on your health. At Naturopathic Specialists we consider a **whole food, anti-inflammatory, intermittent fasting** diet the most beneficial way of eating whether you have cancer or not. You may have heard of the Mediterranean diet, Keto diet, pescatarian diet, Paleo diet, vegan diet, intermittent fasting and others, as well as the many purported health benefits associated with them. Regardless of their different, and often perplexing, names one thing that all these diets have in common is that they are **plant-based** and consist mainly of, **nutrient-dense**, whole foods, that are **minimally processed**. These diets strongly **support our mitochondria, immune systems, and metabolic functions** through the use of therapeutic foods such as **organic vegetables, fruits, responsibly-raised proteins, wild-caught fish, legumes, whole grains, nuts, seeds and other sources of balanced fats**.

Since areas of the body such as our organs, brain, heart, nerves and skeletal muscles are all highly concentrated with mitochondria, they have an increased potential risk for damage, production of **free radicals or oxidative stress** and **functional decline when exposed to unhealthy or inflammatory food choices**. This could include exposure to environmental toxins from chemicals and pesticides, processed-sugary foods, preservatives, chronic imbalances within the body and other insults contributing to decreased health and increased chronic illness, such as cancer. Therefore, **providing the body with rich, nutrient dense, high-quality whole foods will aid the body in producing energy, restoring longevity and vitality**.

This is in stark contrast to the way most people in North America eat, generally known as the "Standard American Diet (SAD)." Research has indicated that diet and lifestyle interventions can provide strong impact on one's health, longevity, vitality and immunity.



Research also shows that strategically restricting consumption of calories and carbohydrates along with an emphasis on plant-based foods, lean and clean (toxin-free) proteins, along with anti-inflammatory omega-3 fatty acids may prevent or slow down the risk of developing diabetes, cancer, neurological and other immune disease.

At Naturopathic Specialists we believe that **every person is unique**. Therefore, each person's diet should be **individualized** and unique to them. Below are our general dietary guidelines. For a more specific or in-depth discussion of nutrition, including personalized nutrition plans, please consult with your Naturopathic Doctor.

How can this type of diet and lifestyle help? Damage to mitochondria can occur from a variety of ways. Specifically, a sedentary or high-stress lifestyle along with eating foods that have encouraged production of oxidative free radicals result in damage to the body, production of inflammatory cytokines and pain, and decreasing production of BDNF.

BDNF (also known as *brain-derived neurotrophic factor*) is a protective protein that boosts synapses and neurons, which is vital for preventing cognitive decline, thinking, learning, and as a first line of defense against neurological disease. Research has shown those that have or are at risk for various neurological and immune disease, and rapid aging are lower in BDNF. In addition, foods consumed in the SAD, elevated blood sugar, and obesity have also been found to lower BDNF. However, **key foods and lifestyle factors** supporting mitochondrial health are the same foods that initiate the gene to turn on BDNF, such as strategized caloric and carbohydrate restriction, increased omega-3 fatty acids, an anti-inflammatory diet, exercise, and mind-body practice. Therefore, the following have been shown to promote and encourage long-term health and wellness.



Protein

1. Protein

When it comes to protein **food quality** is a very important aspect. Protein has been found to stimulate satiety centers in the brain, stabilize blood sugar, help regulate hormones, support bone health, metabolism, weight loss, and brain health. Thus, minimizing inflammation, hunger and cravings. Ideally some source of protein is highly encouraged at every meal.

There is a wide range of protein sources to choose from, whether you are omnivore, vegan, or vegetarian. Regardless, high quality proteins are the best choice. These include locally sourced **grass-fed, organic, non-genetically modified (non-GMO) sourced** meats and organ meats, **wild game, wild caught** fish, organic **free range** poultry and eggs, organic cold processed or fermented soy and legumes. Not only are these sources more **sustainable** but in comparison with conventionally raised and harvested proteins (which may contain hormones, toxic chemicals - ie. PCBs - polychlorinated biphenyls) they are **healthier** to consume.

The link between consuming animal protein and developing cancer is equivocal. What the research currently shows is that the **heme** contained within red meat as well as the **heterocyclic amines** created from cooking red meat at high heats have been found to be **cancer promoting**. Additionally, increased **processed meat consumption** has been correlated with **increased rates of cancer**. The two cancers most influenced by red meat consumption appear to be **colon** and **breast cancer**.

We think that decreasing the amount of animal protein in the diet is an overall good behavior to adopt. Animal protein generally contains more pro-inflammatory biochemicals than plant-based foods. This is especially true if the animal protein you are eating is from conventional sources. This is important as cancer cells generally respond to inflammatory signals by using such signals to their advantage. There are several types of inflammation that can happen in the body, we will get to that in a moment. But it is the fatty acids in the animal products that can create the inflammatory signaling and for this reason we believe it is best to limit red meat.

Protein

The link between animal protein consumption and increased IGF-1 has been well established. IGF-1 is a growth factor for many cancer types. Theoretically, the more IGF-1 in the blood the more chance cancer has to respond to the hormone thus giving the cancer a survival advantage. That said, it is also true that everyone has the gene in their body to produce IGF-1. We need IGF-1 for our growth and development as well as maintenance of our tissues; some people produce more IGF-1 than others. The main determinant for IGF-1 production in the body has previously been shown to be the amount of animal protein consumed in the diet, thus the more animal protein consumed, the higher the production of IGF-1. However, at Naturopathic Specialists we have found that certain diets that continue to include animal protein may actually decrease the production of IGF-1.

Increased muscle mass is a **positive determinant** of health, especially in the elderly and those undergoing active treatment for cancer. One of the best ways to maintain muscle mass is with protein. Many sources of animal protein such as wild caught fish, grass fed dairy, organ meats and free-range eggs are **sources of micronutrients** such as B12, folic acid, zinc, vitamin D and Omega 3s. Their consumption or consumption of **plant based proteins** is encouraged in a whole foods diet. The most **therapeutically indexed proteins** include wild Alaskan salmon, mackerel, sardines, cod, elk, venison, lamb, beef, and buffalo/bison. As you can see the topic of protein consumption and cancer is very complex and nuanced. We recommend speaking to your naturopathic doctor to determine the amount and types of protein that are most beneficial to you.



Dairy

2. Dairy Products

For many people dairy consumption **poses problems** due to their contribution to inflammation, allergy or sensitivity within the body. Due to the high amount of natural sugar in dairy some patients may need to refrain from these products. Dairy contains a milk sugar called, **lactose**, which around **25%** of the American population **cannot digest well**. This causes mild to severe **gastrointestinal irritation**. Dairy also contains enzymes called **protease inhibitors** which can cause **gastrointestinal permeability**, also known as "leaky gut". This leads to further **inflammation** in the GI tract, **prevents proper nutrient absorption, triggers mucous production, allergies, digestive issues and respiratory problems**. Dairy is one of the top **dietary irritants**, and many whom remove dairy from their diet find they have alleviation from long-standing issues.

If you noticed **acne** developing when consuming a **large amount** of dairy, this may be due to both **growth factors** and **hormones** found in certain dairy products. The combination of **sugar** and **protein** contained within dairy have been found to **elevate IGF-1 levels**. As previously stated IGF-1 may enhance tumor growth. Furthermore, dairy has been found to contain **xenoestrogens** which may promote certain tumor growth.

There is evidence showing that dairy consumption can provide both beneficial and harmful effects depending on the type of cancer. Specifically fermented dairy products such as yogurt and kefir contain beneficial bacteria called probiotics which are important for a healthy microbiome, immune system, and digestive system. Research has found that increased dairy consumption decreased the risk of developing colon cancer and low-fat dairy consumption is protective in bladder cancer. However, high fat dairy consumption has been found to increase the risk of developing bladder cancer.

Dairy

A similar association was found in a 2013 study looking at women diagnosed with **early-stage, invasive breast cancer**. Women who ate more **high-fat dairy** had **increased rates of mortality** whereas **low-fat dairy** intake was **not associated with increased overall mortality**. It also depended on if the women were pre- or post-menopausal. Other studies have also found that **increased dairy intake provided protective effects against breast cancer**. There are mixed results when it comes to **prostate** and **ovarian cancer** with studies finding both **positive and negative correlations**.

For these reasons, we generally advise that individuals with cancer avoid or reduce consumption of conventionally-produced dairy products. We recognize that grass-fed dairy and fermented dairy products may be a part of a healthy whole-foods diet.

Consider also unsweetened, cultured coconut milk, yogurt or fermented kefir. Now in 2020, there are many dairy alternatives to choose from including almond, cashew, macadamia, hemp, flax, oat, rice and soy milks. However, try hard to select organic (avoiding GMOs), as well as those that are "unsweetened." Be careful because sweeteners, sugars and other substitutes are commonly added to these dairy alternatives. Again, this is a great subject to discuss with your naturopathic physician.



Carbohydrates

3. Carbohydrates

Carbohydrates are generally considered **problematic** for people with the diagnosis of cancer. Recent studies have shown cancer cells can **only run on glucose, also known as sugar**. Therefore, ridding sugar from the diet can **starve cancer cells**. This is known as the **Warburg effect**. However, recent data has demonstrated the convenient ability of cancer cells to switch their metabolic fuel to compounds such as **fatty acids, lactic acid, and certain amino acids such as glutamine and asparagine**.

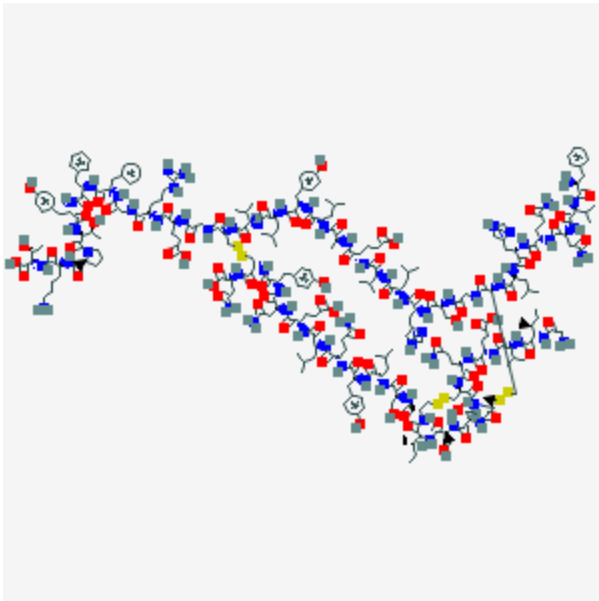
Through the years, many of our new patients come to us having already stopped eating processed foods, especially those with high sugar content. So often on the internet they read that sugar feeds cancer, cancer cannot live in an acidic environment and that cancer cannot live in a high oxygen environment. We call this the "*Internet Triad*" since so often people will read these sayings on the internet and come to the clinic to ask us about them. While there is some degree of truth behind these physiological principles, they are not entirely based on more modern scientific principles of cancer cell metabolism.

Many times we will explain why it is important to limit sugars and simple carbohydrates, as they relate to "acid/alkaline balance" and "oxygen dynamics at the cellular level." However, carbohydrates are present in many foods including fruit, veggies, nuts, seeds, and fiber sources with the exception of animal proteins. But most importantly, is the type, amount, and timing of carbohydrates, which can be strategized for optimal health.



Carbohydrates

Insulin is another hormone produced in the body in response to carbohydrate intake, in order to regulate blood glucose levels in the body. **Maintaining an appropriate insulin level is one key to optimal overall health, while preventing development, progression, or recurrence of disease.**



However, under times of stress and increased carbohydrate intake, large amounts of insulin is produced by the pancreas, targeting some of the same physiological pathways as IGF-1 (insulin like growth factor-1) as mentioned above. Normally, insulin stimulates GLUT4 synthesis transporting glucose into the cells and liver to be used. Insulin Resistance or “Type 3 Diabetes” results when there’s continuously high levels of blood sugar in the body and GLUT4 stays in its storage vesicle no longer responding to insulin and the transportation of glucose in the blood stream. When we are not taking in glucose (eating food), the body will find other ways to fortify the blood with glucose. This glycogen breakdown results in both increased blood glucose levels as well as increased glucose uptake by adipose (fat) tissue. This could lead to insulin insensitivity and weight gain. Intake of highly processed carbohydrates has been linked to increased dopamine levels in the brain. Many refer to this as a *sugar addiction*, however, this can be detrimental as it leads to other behavioral patterns of overeating and obesity.

Carbohydrates

Furthermore, a diet high in processed or high-glycemic index foods results in elevated levels of insulin, inflammation, and oxidative stress, associated with mitochondrial dysfunction, accelerated aging and chronic disease. Therefore, high carbohydrate leads to high amounts of inflammation in the body. Minimizing grains (avoiding high processed, high glycemic grains) and implementing low glycemic vegetables (tubers/root veggies), fruit (berries), some legumes, and sprouted whole grains as main sources of carbohydrates aids in stabilizing blood glucose and insulin levels. Avoiding consumption of all processed forms of carbohydrates (anything “white”), and overall limiting carbohydrates reduces glucose metabolism which has been shown to have multiple benefits on health decreasing adipose tissue accumulation, weight gain, preventing risk of Alzheimer’s, cancer, and other immune-related diseases.

Recent studies have linked processed carbohydrate consumption to everything from the obesity epidemic to heart disease. At Naturopathic Specialists, we do not believe in demonizing any one macronutrient, but we feel context is important. We know excess refined carbohydrate consumption can lead to weight gain, resulting in adverse health outcomes. Therefore, we believe it is best to monitor your carbohydrate intake and limit it to less than 150 grams/ day.



Fats

4. Fats

Fats have been demonized in the media for the past 30 years. It has been found that the **low-fat** craze has been **detrimental to our overall health** as a society. The scientific, as well as, the public's, opinion on fat has shifted in the past few years. Fat has been found to have many health benefits and is no longer implicated in conditions such as **heart disease**. Not only do the type of carbs you eat have a significant effect on cancer, but the fat you eat can have a great influence. A healthy brain and metabolism thrive when consuming quality fats such as EPA and DHA. Adequate consumption of Omega-3 fatty acids found in cold water fish (salmon, mackerel, and sardines), seaweed and egg yolks, walnuts, and flax may prevent cancerous tumors from growing (possibly cause them to regress), support mitochondrial health, improve fat burning and energy production, increase neuronal communication, and decrease inflammation.

Diversity is also key when considering oils for cooking, use for salad dressings, or supplementation. Additionally, the ratios of omega 3/6/9s are very important for contributing to inflammation or preventing disease.

Specifically, most are deficient in Omega-3 fatty acids due to the ratio in our food supply. The traditional SAD includes an abundance of omega 6s due to an overabundance of processed and packaged foods, contain these and processed vegetable oils. Any source of inflammatory oils and less healthy factory raised meats may come from many establishments that prepare your food while you are waiting in your car. Some research has demonstrated that a **4:1 ratio of omega 6s to omega 3s** may keep the body in an anti-inflammatory state, however in the testing we have done at the clinic, we have found this ratio to be closer to 2:1 or 1:1. And sometimes, people frankly just require dietary supplementation with omega 3 fatty acids. The SAD generally boasts a ratio of **omega 6s to omega 3s closer to 20:1**. This will lead to **systemic inflammation** and all the problems that follow.

Fats

Fats in your diet should consist mostly of omega-3 fatty acids:

- Fatty fish, chia seeds, flaxseeds, hempseeds, 100% grass-fed meats. Fish with the highest omega-3 content include (highest to lowest) **anchovies, herring, sardines, Pacific mackerel, sablefish, chinook salmon, wild-caught canned pink salmon, wild rainbow trout (some canned fishes are appropriate as well; when eating canned look for cans that are BPA-free)**
- Reduce intake of oils and seeds which are higher in omega 6
- Avocado, nuts and olives are also healthy to eat; they contain mostly another type of fat called omega-9, which have been found to have significant health benefits
- Avocado, coconut and palm oils are healthy oils for cooking due to their high-heat profile
- Some free-range eggs are also a healthy source of omega 3s
- Avoid ALL oils in clear plastic containers as these sources are often rancid, absorb PCBs from the plastics and are not healthy oils

There is an enzyme which is commonly over-expressed in cancer cells called, **COX-2**. This enzyme is associated with a dietary fat called **arachidonic acid** found in many animal foods including poultry, eggs, dairy and animal protein, specifically **grain-fed** cows. COX-2 is active in most types of cancer cells or in their local environment. We suggest you choose animal products that are organic and **100% grass-fed**, their ratios of saturated fats to omega 3 fats are in a healthy proportion. Wild-caught fish, 100% grass-fed meat, pastured free-range poultry, hempseeds, flax and chia seeds generally do not contain high amounts or any arachidonic acid, and do not usually abnormally activate COX-2.



Fats

Saturated fat consumption from **conventionally-raised** animal fat is **pro-inflammatory** due to the way the animals were fed and raised and has been implicated in the development of **multiple types of cancer**. Therefore, these types of saturated fat intake should be limited. Controversially, coconut oil is a saturated fat containing medium chain triglycerides (MCTs) which have been proven to modulate inflammation, improve fat metabolism, brain cognition, and support mitochondrial function. Organic, unprocessed, unsweetened coconut-based products have benefits, and can be considered high quality, along with other healthier sources of saturated fats such as from **grass-fed animals, free-range eggs** and **grass-fed butter**.



The **Ketogenic diet** is usually characterized by a **high fat, moderate protein, and low carbohydrate diet**. Contrary to the SAD, this shift in macronutrients from higher carb to higher fat allows the body to use fatty acids through the production of ketones as a primary source of fuel. When fat is converted to fuel in the liver, ketone bodies: **Beta-hydroxybutyrate, acetoacetate and acetone** are produced. Beta-hydroxybutyrate or BHB is the primary and most prevalent ketone the body both produces and utilizes for generating sustained ATP (energy). Research has shown production of ketones and the ketogenic diet have many reported health benefits including protection of neurons, protecting cells from free radical damage, reducing the risk of epilepsy, multiple sclerosis (MS), ALS, brain tumors, anti-cancer properties. A ketogenic diet mimics the fasting state and although it has many benefits, you may need to be medically monitored. Therefore it is recommended you speak to your Naturopathic doctor to see if this diet is beneficial for you.

Calorie Consumption

Calorie Consumption

You may have heard the sayings “calories in, calories out” and “a calorie is a calorie”. These are deceiving statements that also hold some truth. When it comes down to it if you want to **lose weight** you need to **consume less calories** than you burn. If you wish to **gain weight**, then you need to **consume more calories**. However, not all calories are created equal and the quality of your calories does matter. This is especially true in patients with cancer. The type of calories you consume affects your **hormones** which in turn affect **satiety** and make it easier or harder to lose weight. Furthermore, those hormones directly affect the tumor microenvironment and can influence cancer growth. At NS we use advanced metabolic screenings and body composition analysis to determine the quality and quantity of calories you should be consuming.

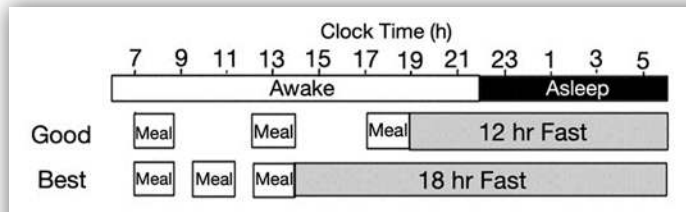
Fasting has a long history of use as a **medical therapy**. Recent research has shed light on the many benefits of fasting. Fasting has been shown to **increase** the **efficacy** of **conventional oncology treatments** and **lower** the **dose patients need**. It also helps the body reset and restores **homeostasis**. There are many different forms of fasting such as water fasts, once weekly fasts, or **intermittent fasting**. However, fasting can act as a stressor to the body. Therefore, people with cancer should discuss fasting with their naturopathic physician.

Intermittent fasting aka Time Restricted Feeding Methods:

A good way to start: At least 12 hours of fasting is needed for benefit. You can start avoiding food for a 12- hour period of time such as 7 pm to 7 am. This is likely the easiest and least intrusive to common eating patterns.

Calorie Consumption

The best method: fasting 16-18 hours a day has been found to be most effective in improving health. This requires food to be consumed within 6-8 hours a day.



5:2 Intermittent Fasting Method

Similar to the 6-8 hours of restricted feeding, fasting two days a week and eating regularly for 5 days may better suit your needs and has also been found to be effective. The end goal is to reduce to 500 calories a day for two days a week. Calculating calories in this way can be made easier with certain electronic applications.

Working Your Way Up

When starting this therapy, many people can experience hunger, irritability and difficulty concentrating. But these symptoms often resolve after the first month of fasting.

Month	Time-Restricted Feeding	5:2 Intermittent Fasting
1	10 hr feeding pattern 5 days/week	1000 Calories 1 day a week
2	8 hr feeding pattern 5 days/week	1000 Calories 2 days a week
3	6 hr feeding pattern 5 days/week	750 Calories 2 days a week
4 (Goal)	6 hr feeding pattern 7 days/week	500 Calories 2 days a week

Organic Foods

Organic Foods

Many of our patients ask us about organic food consumption and while we believe that choosing organically grown foods is important, below are some of our reasons:

1. Some people choose organic food because they prefer the taste. Many people have discerning senses and can actually taste the chemicals in the food. Think about it...for centuries, all that was available was organic food, chemicals have only been introduced into human food very recently (as far as a timeline goes) and we do not yet know the full extent of harm which can come to a person by consistently eating such chemicals.

2. Many chemical ingredients may be associated with cancer. In March 2015 The International Agency for Research on Cancer (IARC), said that the herbicide glyphosate and the insecticides malathion and diazinon were classified as probably carcinogenic to humans (group 2A) and that the insecticides tetrachlorvinphos and parathion were classified as possibly carcinogenic to humans (group 2B).

These chemicals are key ingredients in hundreds of crop-control agents and weed killers and if you are not concentrating on organic produce, you are most likely ingesting these agents regularly.

3. Pesticides which protect crops from molds, insects and diseases, and when applied to crops, the residue remains when you purchase produce in the stores. Organic farmers use more natural forms of plant protection such as insect traps, careful crop selection (disease-resistant varieties), predator insects or beneficial microorganisms.

4. Certain regulations on organic farming place significant restrictions or bans on the use of food additives, processing aids, and fortifying agents commonly used in nonorganic foods, including preservatives, artificial sweeteners, colorings, and flavorings, and monosodium glutamate.

5. Some people buy organic food for environmental and ethical reasons.

Vacation Days

Vacation Days

Lets face it, sometimes you just need a 'dietary restriction vacation,' and we understand that which is why we believe that when someone is at least **80%** compliant with our dietary suggestions, we see the most success. If you feel that from time-to-time you need to "splurge" on your diet then we would rather have you splurge and go eat some comfort food once in a while, and maintain 80% or greater compliancy over the long term rather than go 100% and have it be short-lived.



Hydration

Hydration

Hydration is an often-overlooked nutritional deficiency with far-reaching health effects.

Water is one of the most important nutrients in the human body. Our bodies can go as long as 8 weeks or more without food, but only days without water as water makes up 60+% of our total body mass. In an average adult, that equates to 10-13 gallons of water. Most of the volume of cells and body fluids is also comprised of water. If the body's water content drops by as little as 2%, it can certainly cause fatigue. A drop of 10% will cause significant health problems such as digestive, cardiovascular, immune and musculoskeletal issues, and a loss of water greater than 10% may even cause death.

early signs of dehydration include:

- fatigue
- anxiety
- irritability
- depression - cravings - cramps
- headaches

signs of **chronic** low hydration include:

- heartburn
- joint pain
- back pain - migraines
- constipation

Why is water so important for our overall health?

The body can produce about 8% of its daily water needs through metabolic processes. The remaining 92% **must be ingested** through the foods we eat and the beverages we drink. Even though the amount and distribution of water are regulated within the body, water cannot be stored. This makes daily consumption of water essential for a healthy body.



Hydration

Below is a list of the important roles water plays in the optimal functioning of the human body:

- improves oxygen delivery to cells
- transports nutrients
- enables cellular hydration
- moistens oxygen for easier breathing
- cushions bones and joints
- absorbs shock to joints and organs
- regulates body temperature
- removes wastes
- flushes toxins
- prevents tissues from sticking
- lubricates joints
- improves cell to cell communication
- maintains normal electrical properties of cells
- empowers the body's natural healing processes

Keep in mind, that in order for our bodies to absorb and process water properly, **electrolytes** must be naturally present in the water we consume; water is dependent upon electrolytes for proper absorption.

What are electrolytes?

Electrolytes are minerals that become capable of conducting electricity when dissolved in water; they have four general functions:

- to control the osmosis of water between fluid compartments
- to help maintain pH balance
- carry electrical current
- serve as cofactors needed for optimal activity of enzymes within our bodies

An easy and inexpensive way of adding electrolytes to your drinking water is to add a pinch of natural salt (Celtic or preferably Himalayan). This gives water the charge it needs to properly hydrate you at cellular level. Adding in a squeeze of organic lemon juice gives the water added flavor and also helps alkalinize your body. Additionally, your physician may suggest a course of electrolyte water treatments or additives depending on your additional needs.

Hydration

The importance of water quality

Finding pure, clean living water is difficult these days. Our pre-filtered water resources are contaminated with a myriad of industrial chemicals, pharmaceutical drugs, pathogenic organisms, fluoride and so many other dangerous substances, too numerous to mention here. The good news is that you can still find healthy water. One option is to go to www.findaspring.com or visit www.ewg.org for news and information on clean water. Invest in a good water system for both your drinking and shower; consider a whole-house filtration system or consider at least putting a filter at your shower head. Our skin is our largest organ and toxins do enter through the skin and inhaled through vapors in hot showers.

A very important note about distilled water...

Distilled water has its mineral content removed, therefore it no longer has electrolyte activity. To process this “distilled” water, your body will donate its own minerals (electrolytes) to be able to absorb and utilize the distilled water. Therefore, drinking distilled water removes minerals from your body’s own mineral reserves to process the distilled water, bringing about multiple mineral deficiencies. Distilled water is not the best choice for your drinking water and should be used very sparingly, if at all, or only for specialized purposes.



Hydration

How many ounces of water should you be drinking on a daily basis?

To determine your **bio-individual daily water intake**, you should ask your physician. When drinking **diuretic and/or caffeinated beverages, sweating heavily during exercise, or having some other reason for water-loss**, your water requirements may be heavier. If you take diuretic medications, please discuss your water intake with the prescribing physicians.

Below is a list of common diuretic and/or caffeinated beverages:

- coffee
- caffeinated teas
- caffeinated sodas
- alcoholic beverages
- packaged/concentrated fruit juices

Chronic cellular dehydration of the body is the potential cause of many degenerative issues. By properly promoting your daily intake of water, adequately replenishing the water lost from diuretic/caffeinated beverages, adding a pinch of sea salt or mineral drops for optimal absorption and assimilation of water, along with (potentially) a squeeze of lemon to alkalinize your systemic pH, you will successfully hydrate yourself each and every day to age gracefully, feel younger and more energetic, and maintain overall vibrant health.



Genetically Modified Foods

Genetically Modified Foods

The six major GMO crops are soy, corn, canola, cottonseed, sugar beets and alfalfa. Other GM crops are Hawaiian papaya, tomatoes, and a small amount of zucchini and yellow crookneck squash. In our opinion, these foods are only okay if you purchase the organic forms. There is some thought that GMO foods are more harmful than pesticide-ridden foods, in the long run. Genetic modification of foods is a very important issue, especially for people that are healing from disease (or surgery) or those that have lowered vitality due to treatment (such as chemotherapy or radiation) or those that have more serious illness. The fight for labeling GMOs (genetically modified organisms) is far from over. As a matter of fact, the fight is gaining momentum as more Americans are becoming educated about how exactly their food supply has been altered. Studies as far back as 1996 have looked at health effects of eating genetically modified foods.

For those just tuning into the topic, GMOs are plants or animals that have been altered genetically with DNA from bacteria, viruses or other plants and animals. The outcome is essentially a new species of these modified plants and animals that **do not occur in nature.**

There are two types of GMO crops: 1) one which is genetically altered to withstand large amounts of toxic herbicides, namely *glyphosate*; and 2) those designed to produce their own poisonous insecticide in each cell. The insecticide called BT (*Bacillus thuringiensis*)-toxin works by “punching a hole in the gut lining” of insects when consumed by those insects. The food that you, your family, friends and patients are consuming might unknowingly be laden with GMO ingredients. This is because in America the food industry is not currently required to label it as such.

For more on the subject of GMO/GMs, we prefer you to speak with your physician

Other Food Subjects

Other Food Subjects

Cooking methods:

How you cook your food is almost as important as what food you are eating. It has been found that cooking food at high heats, i.e. frying food, or cooking food under a direct flame creates carcinogens. These carcinogens have been implicated in the etiology of various cancer such as colon and breast. Marinating meats can help reduce the amount of carcinogens produced. However, we recommend using low and slow methods of cooking such as baking, steaming and boiling.

Steamed vegetables:

- The primary reason for using steamed vegetables is that steaming improves the utilization or the availability of the food nutrients allowing the gastrointestinal mucosa to repair itself. Use minimal raw vegetables except as a salad. Include at least one green vegetable daily.

- Eat a variety of any and all vegetables (except tomatoes and potatoes) that you can tolerate. It is best to try and eat mostly the lower carbohydrate (3, 6%) vegetables.

For example:

- asparagus, bean sprouts, beet greens, broccoli, cabbage, cauliflower, celery, swiss chard, cucumber, endive, lettuce, mustard greens, radishes, spinach, watercress;
 - string beans, beets, brussels sprouts, chives, collards, eggplant, kale, kohlrabi, leeks, onion, parsley, red pepper, pumpkin, rutabagas, turnips, zucchini;
 - artichoke, parsnips, green peas, squash, carrots;
 - yams
- Add your favorite spices to enhance the taste of vegetables; consider curry/turmeric/ginger for their anti-cancer effects.



Other Food Subjects

Sustainability: At NS we believe living sustainably is the best way to live. We support buying from local businesses. We also believe the best food is that which comes directly from the farm. If you can, it is best to get your food directly from local organic farmers. The organic farming movement is more popular than ever and it is easier than ever to find a local farmer to buy from.

<http://www.eatwild.com/products/>

<https://www.localharvest.org/organic.jsp>



Food Lists

Food Lists

The following foods are best suited for most people with cancer or wanting to prevent cancer:

- cruciferous vegetables/ leafy greens including cabbage, broccoli, broccoli rabe, broccoli sprouts, kale, collard greens, cauliflower, kohlrabi, Brussel sprouts, turnips, turnip greens, mustard green, radishes, bok choy, watercress and rutabaga. We recommend that you lightly steam these and chew thoroughly
- one serving of cruciferous vegetables is equivalent to one cup raw, ½ cup cooked, ¾ juiced
- cruciferous vegetables contain a whole array of nutrients shown to inhibit cancer and detoxify the body from carcinogens. They are also an excellent source of various nutrients that have anti-cancer benefits

Avoid refined carbohydrates and gluten containing grains as much as possible (white flour, white bread, semolina pasta, couscous crackers, many commercial brands sold in non-health food-related markets contain hydrogenated oils, gluten and sugar).

Avoid or reduce

- omega-6 fats
- chicken, turkey, pork, beef and eggs from conventional sources.
- all supermarket vegetable oils in plastic bottles and anything partially-hydrogenated
- refined carbohydrates



Food Lists

Fruit:

- **Fructose:** Fruit is high in a sugar called fructose. Research has found that fructose is processed by the liver and converted into triglycerides. High triglycerides are responsible for non-alcohol fatty liver disease (NAFLD), heart disease and many other problems.
- We recommend eating only 1 or 2 pieces of fruit daily. It is preferred to eat the fruit earlier in the day as most people are active in the earlier parts of the day and the carbohydrates in the fruit will get used for energy production during those high-activity times
- Eat fresh fruits that are organic and in season like berries, apricots, peaches, kiwi, apples and pears.
- Like the vegetables, try to eat mostly the low carbohydrate fruits. for example:
 - cantaloupe, rhubarb, strawberries, melons
 - apricots, blackberries, cranberries, peaches, plums, raspberries, kiwi
 - apples, blueberries, cherries, mangoes, pears, pineapple, pomegranates

Sweeteners:

- Occasionally maple syrup, coconut nectar, honey or other naturally based sweeteners (organic of course)
- Please try to avoid white sugar, artificial sweeteners that contain aspartame, acesulfame or saccharin
- Sucralose is difficult for most people to digest and thus we do not generally recommend it
- Stevia is acceptable
Absolutely try to avoid artificial sweeteners

Seeds and nuts:

Grind flax, pumpkin, sesame or sunflower seeds and add to steamed vegetables, cooked grains, etc. You may also eat nut and seed butters, such as almond, cashew, sesame, etc. Soaking nuts and seeds for 12 hours in sea salt and water and drying them in a dehydrator or oven on a low temperature increases digestibility and liberates anti-nutrients.

Food Lists

Butter/oils:

- for butter, mix together 1 pound of butter and 1 cup of cold-pressed extra virgin olive oil (from a new dark jar). whip at room temperature and store in the refrigerator
- If eating butter use grass fed butter such as *Kerrygold*
- Use extra virgin olive oil, coconut oil, or avocado oil for all other situations requiring oil
- Ghee (clarified butter) is also stable at high heat and easy to digest



More Food Resources

More Food Resources

Thinking of going vegan? Here are the protein contents in some foods:

protein content of selected vegan foods			
FOOD	AMOUNT	PROTEIN (gm)	PROTEIN (gm/100 cal)
Tempeh	1 cup	41	9.3
Seltan (gluten/wheat based)	3 ounces	31	22.1
Soybeans, cooked	1 cup	29	9.6
Lentils, cooked	1 cup	18	7.8
Black beans, cooked	1 cup	15	6.7
Kidney beans, cooked	1 cup	13	6.4
Veggie burger	1 patty	13	13.0
Chickpeas, cooked	1 cup	12	4.2
Veggie baked beans	1 cup	12	5.0
Pinto beans, cooked	1 cup	12	5.7
Black-eyed peas, cooked	1 cup	11	6.2
Tofu, firm	4 ounces	11	11.7
Lima beans, cooked	1 cup	10	5.7
Quinoa, cooked	1 cup	9	3.5
Tofu, regular	4 ounces	9	10.6
Bagel	1 med. (3 oz)	9	3.9
Peas, cooked	1 cup	9	6.4
Textured Vegetable Protein (TVP), cooked	1/2 cup	8	8.4
Peanut butter	2 Tbsp	8	4.3
Veggie dog	1 link	8	13.3
Spaghetti, cooked	1 cup	8	3.7
Almonds	1/4 cup	8	3.7
Soy milk, commercial, plain	1 cup	7	7.0

Soy yogurt, plain	6 ounces	6	4.0
Bulgur, cooked	1 cup	6	3.7
Sunflower seeds	1/4 cup	6	3.3
Whole wheat bread	2 slices	5	3.9
Cashews	1/4 cup	5	2.7
Almond butter	2 Tbsp	5	2.4
Brown rice, cooked	1 cup	5	2.1
Spinach, cooked	1 cup	5	13.0
Broccoli, cooked	1 cup	4	6.8
Potato	1 med. (6 oz)	4	2.7

Sources: USDA Nutrient Database for Standard Reference, Release 18, 2005 and manufacturers' information.
 The recommendation for protein for adult males vegans is around 56-70 grams per day.
 The recommendation for protein for adult female vegans it is around 46-58 grams per day.

COOKBOOKS FOR HEALTH

Coffey, Lynette. WHEATLESS COOKING. Recipes written by the mother of a wheat and gluten allergic child. A must for anyone with the same culinary needs.

Kemp, Domini and Daly, Patricia. THE KETOGENIC KITCHEN: LOW CARB, HIGH FAT, EXTRAORDINARY HEALTH. Cancer survivors Domini Kemp and Patricia Daly offer the first comprehensive ketogenic cookbook based on the most exciting new research on nutritional approaches to the prevention and management of cancer.

Colbin, Annemarie. THE NATURAL GOURMET. Simple, tasteful recipes. Colbin incorporates Eastern eating philosophy and western eating habits. A very inspired way to look at foods.

More Food Resources

Diamond, Marilyn.

THE AMERICAN VEGETARIAN COOKBOOK from FIT FOR LIFE.

The fit for life approach to foods is based in the study of Natural Hygiene- that the body is self-cleansing, self-healing and self-maintaining. One of the tenets is proper food combining for optimal digestion. The recipes are dairy-free and there are a lot of vegan substitute recipes and many recipes for kids. The recipes are easy to follow and there are nutritional charts and tables in the back of the book.

THE NEW FARM VEGETARIAN COOKBOOK.

First published in 1975. The Farm, a vegetarian community, pioneered much of what we know about vegan nutrition and soyfoods. This has been updated for the 90's with lower salt and fat. Includes information as to how to make tofu and soymilk as well as other basic recipes of a vegan kitchen.

Goldbeck, Nikki & David.

AMERICAN WHOLEFOODS CUISINE. The joy of Cooking for whole foods.

Clear concise directions for quick, healthy meals. Includes fish recipes.

Goldbeck, Nikki.

THE SUPERMARKET HANDBOOK.

Nutrition information that is easy to understand with recipes at the end of the book. Includes recipes for lunch boxes.

Hills, Hilda.

GOOD FOOD, MILK FREE, GRAIN FREE.

Includes dairy substitutes, meat, fish, and recipes for breads, soups and cakes.

Hurd, Rosalie. TEN TALENTS. A Seventh day Adventist approach to vegetarianism. Includes recipes for baby food, food remedies, charts and tables of nutritional needs, food glossary and many simple whole foods recipes. Good for beginners to vegetarian cooking.

Katz, Rebecca.

THE CANCER FIGHTING KITCHEN. Great resource for information about foods, spices and more that help fight inflammation and more that can be related to cancer.

More Food Resources

Katzen, Mollie. THE MOOSEWOOD COOKBOOK and THE ENCHANTED BROCCOLLI FOREST. Katzen revised these classics in 1992 to lower the fat and lighten the taste. These have been a favorite for years with the wide array of straight forward, delicious recipes. Includes prep time and variations on the recipes. Soup, salads, breads, main dishes, and desserts.

Katzen, Mollie. STILL LIFE WITH MENU. Light, fabulous recipes arranged in a menu format. Often inspired by different ethnic kitchens. Chapter in the back discusses ways to optimize time management in the kitchen. Beautiful illustrations.

Lair, Cynthia. FEEDING THE WHOLE FAMILY. An excellent resource of whole food vegetarian recipes. Adaptations for nutritional needs of babies, kids and pregnant women. Also lunchbox recipes. Budget considerations accounted for as well.

Nishimoto, Miyoko. THE NOW AND ZEN EPICURE. An elaborate, elegant and somewhat complex collection of vegan recipes.

STEVEN RAICHLEN'S HIGH FLAVOR, LOWFAT VEGETARIAN COOKBOOK. Beautiful photographs, nutritional analyses and an award winning cookbook. Most of the recipes are not for everyday cooking but rather for occasions.

Robertson, Laurel. THE NEW LAUREL'S KITCHEN. Vegetarian times readers voted this book the best for beginners. It was updated for the 90's with lighter and simpler recipes. Also includes nutritional information. Sections on cooking techniques and menu suggestions.

Saltzman, Joanne. AMAZING GRAINS. Vegetarian recipes with whole grains. A great introduction to the many choices of grains and ideas to bring them into your diet. A good book for people needing to avoid the common grains but not sure how to bring the others in.

Shattuck, Ruth. THE ALLERGY COOKBOOK. Recipes with no wheat, dairy, corn or eggs. Substitution tips and 300+ recipes.

More Food Resources

Tracy, Lisa. THE GRADUAL VEGETARIAN. Separated into three phases 1) Chicken, fish and dairy 2) Fish and dairy 3) vegan. Addresses strategies, sweeteners and allergies too.

THE VEGETARIAN TIMES COOKBOOK. Ideas about what to have in the house, cooking to maintain nutrition and over 400 recipes.

Urban, Melissa.
THE WHOLE 30: THE 30 DAY GUIDE TO TOTAL HEALTH AND FOOD FREEDOM. This is a great book for understanding food sensitivities and getting off of sugar, grains, and other inflammatory foods. There are many additional books and online resources related to this.

Wasserman, Debra. SIMPLY VEGAN. Very basic and easy to prepare vegan recipes.

Zukin, Jane.
THE DAIRY FREE COOKBOOK. Recipes, nutritional analysis and a discussion about feeding babies dairy-free.

FORKS OVER KNIVES also has a great array of cookbooks for plant based cooking.



Targeting Cancer

Targeting Cancer Stem Cells

Despite advances in targeted therapies for cancer and a move towards personalized precision medicine, a significant impact on survival for many patients is yet to be realized in conventional medicine. Targeted therapies are limited to a small proportion of patients and toxicities are prevalent which often times lead to stopping treatments. Additionally, development of resistance arises from the acquisition of genetic and epigenetic alterations, meaning that maintaining drug efficacy remains challenging for many patient cohorts. Novel strategies are required to address this unmet need.

Analysis of epidemiological data has enabled the identification of a number of dietary exposures that have an inverse relationship with cancer. This is where the belief in naturopathic medicine to *let food be thy medicine* can come to help when trying to target cancer. Below is a list of known targets found in foods that can be helpful.

natural food compound	sources	cancer stem cells targeted	amounts suggested
EGCG	green tea	breast, colon, pancreatic	2 cups of green tea daily
Caffeine	Coffee	Colon	2-4 cups daily
6-gingerol	ginger	colon	No more than 4 grams of root daily, 1-2 cups of tea daily
beta-carotene	potato, carrot, leafy greens	neuroblastoma	5 cups of vegetables to get 2-6mg in diet
baicalein	<i>Scutellaria baicalensis</i>	bone marrow, CML	1 cup of tea daily
curcumin	turmeric	breast, brain, colon, pancreas	Cut root: 1.5 – 3 g per day Dried, powdered root: 1 – 3 g per day
delphinidin	blueberry, raspberry	neuroblastoma	1-2 cups of the whole fruit daily
genistein	soy, legumes	breast, ovarian, kidney, melanoma	1-2 cups of tofu daily
isothiocyanates	cruciferous vegetables	prostate, pancreas, cervix	12 ounces or more daily
Linalool (toxic)	mint	AML	mint can be used as garnish or small amount of leaf ingested
lycopene	tomatoes, grapefruit	breast	1 cup of tomato juice is 25mg of lycopene 1-6 cups daily suggested
perilyl alcohol	mint, cherry, lavender	Burkitt's Lymphoma, lung	1 cup of cherries eaten daily and mint and lavender essential oil is safe topically, but oral ingestion is not recommended
piperine	black pepper, long pepper	breast	20mg of piperine to 2,000mg of turmeric to increase bio-availability Black pepper contains 5-9% piperine.
quercetin	capers, pepper	breast, oral cancer, pancreas, colon	3-5 ounces of capers is approx. 200mg of quercetin. other sources are apples, yellow onion, yellow squash and other yellow foods.
resveratrol	grapes, plums, berries	mammospheres, medulloblastoma, colon	5 oz of red wine is only 1-2mg of resveratrol. red grapes, berries, and plums are better sources in the diet
salinomycin	<i>Streptomyces albus</i>	breast, cervical, prostate, colon	5 microgram/kg is safe oral dose limit
silibinin	milk thistle	breast, lung, prostate, colon	1-2 cups of milk thistle tea daily
ursolic acid	Thyme, basil, oregano	breast, colon, prostate	Add several leaves of each to meals to oral and GI tolerance
vitamin D3	Fish, egg yolk, beef	breast, basal cell carcinoma	3.5 oz f fish = 400iu, studies show wild caught fish 500-900 iu, 1-2 eggs daily and grass fed beef 1-2 times monthly

Targeting other cancer pathways

There are many genetic and molecular pathways that can lead to the development and exacerbation of cancer. Diet is one of the best ways to help modulate and control these pathways. Below are some of the most common pathways upregulated/downregulated in cancer and some nutrients that can affect those pathways.

Targeting Cancer

Natural PI3K/AKT/mTOR inhibitors

The AKT/mTOR pathway is one of the main cellular growth pathways in the body. In certain cancers this pathway is upregulated leading to uninhibited cellular growth. Certain natural compounds can modulate the PI3K/AKT/mTOR pathway.

Natural Food Compounds	Sources
Genistein	Soy, legumes
Indole-3-carbinol	Brussels sprouts, garden cress, mustard greens, kale, turnip, cabbage, watercress, cabbage, broccoli, cauliflower, Bok choy, horseradish, kohlrabi
Curcuminoids	Turmeric
EGCG	Green tea
Quercetin	Capers, elderberry, onions, apples, grapes, nectarines, black tea
Resveratrol	Grapes, plums, berries, wine
Caffeine	Coffee, tea
Omega 3's	Wild caught fish, nuts, seeds
Silbinin	Milk thistle
6-shogaol	Ginger

Natural TP53 modulators

P53 is one of the main tumor suppressor genes in the body. It plays a role in programmed cell death, genomic stability, and inhibition of angiogenesis. Mutations in this gene lead to uninhibited cellular proliferation. Certain natural compounds can modulate TP53 expression.

Natural food compounds	Sources
Curcuminoids	Turmeric
Resveratrol	Grapes, plums, berries, wine
EGCG	Green tea
Indole-3-carbinol	Brussels sprouts, garden cress, mustard greens, kale, turnip, cabbage, watercress, cabbage, broccoli, cauliflower, bok choy, horseradish, kohlrabi
Silbinin	Milk thistle

Targeting Cancer

Natural BRCA inhibitors

BRCA1 and BRCA2 are genes that produce tumor suppressor proteins. These genes help to repair damaged DNA and ensure genetic stability. Mutations in this gene increase the risk of developing certain types of cancer such as breast and ovarian cancer. Certain natural compounds can help modulate expression of this gene.

Natural food compounds	Sources
Genistein	Soy, legumes
Resveratrol	Grapes, plums, berries, wine
EGCG	Green tea
Indole-3-carbinol	Brussels sprouts, garden cress, mustard greens, kale, turnip, cabbage, watercress, bok choy, broccoli, cauliflower, horseradish, kohlrabi



Targeting Cancer



Natural PARP inhibitors

Poly ADP-ribose polymerase (PARP) is an enzyme involved in DNA repair, cell death and genomic stability. This family of enzymes is upregulated in certain types of cancers and can aid in cancer development. Certain natural compounds have been found to inhibit PARP and therefore aid in cancer prevention and treatment.

Natural food compounds	Sources
Niacinamide	Mushrooms, potato, oatmeal, cheese, cottage cheese, liver, chicken, turkey
Quercetin and other flavinoids	Capers, elderberry, onions, apples, grapes, nectarines, black tea
Sulforaphane	Broccoli sprouts, broccoli, cauliflower, kale, brussels sprouts, cabbage, bok choy, collards, mustard greens, arugula, turnips, watercress
Curcumin	Turmeric
Vitamin D	Fatty fish, liver, egg yolks, grassfed dairy, mushrooms
Taurine	Fish, shellfish, dairy, poultry
Theobromine and theophylline	Coffee, tea, cocoa
Trehalose	Mushrooms

Juicing

Juicing

It can be a great way to get in extra fruits and vegetables. Here are a few recipes for inspiration. If using a centrifuge juicer where pulp is eliminated, you can either add it back in once juiced for added fiber, or use pulp to make veggie bread and *veggie muffins*.....see recipes below:

Juice Recipes:

ABCs

2 Asian pears
2 Apples (Choose any variety!)
2 Beets
2 Carrots
1 cup Cabbage (choose any variety!)
6 handfuls Chard 3 cups

Calories: 430, Protein: 11g, Fiber: 2g

Apple-Beet-Carrot Juice

1 Apple
2 Beets
3 Large Carrots
1 Piece Ginger (thumb sized)
4 cups Spinach/Kale

Calories: 280, Protein: 8g, Fiber: 2g

Apple-Cantaloupe-Honeydew-Kale-Swiss Chard

2 Apples
1/2 Cantaloupe
1/2 Honeydew
6-8 leaves Kale
6-8 leaves Swiss Chard

Calories: 320, Protein: 10g, Fiber: 4 g

Apple-Carrot-Beet

2 Apples
4 Carrots
2 Beets
6 leaves Swiss chard – 1.5 cup
1" ginger root (1 tablespoon)

Calories: 300, Protein: 9g, Fiber: 2.5g

Apple-Cabbage-Carrot-Swiss Chard-Ginger-Lemon

2 Apples
1 wedge Red Cabbage
2 Large Carrots
1 Piece Ginger (thumb sized)
6 leaves Swiss Chard 1/4 lemon

Calories: 321, Protein: 10g, Fiber: 2g

Juicing

Beet, Celeriac, Carrot Juice

4 Carrots, stems removed
1/2-1 Apple, seeded
1/2 Celeriac root
1 Beet
1/4 inch slice Ginger root (optional)

Calories: 285, Protein: 7g, Fiber: 1g

Blackberry Kiwi

1/4 large Pineapple, core removed and roughly cubed
1 cup Blackberries
1 Kiwi Fruit
1/4 Comice Pear
1/4 cup Coconut Water
30 Mint leaves

Calories: 230, Protein: 5g, Fiber: 2g

Carrot-Kale Combo

1 Green Apple
3 handfuls Spinach
6-8 Kale leaves
4 large Carrots
1 piece Ginger (thumb size)

Calories: 280, Protein: 9g, Fiber: 1g

Gazpacho Juice

4 Plum Tomatoes
1 large Cucumber
2 stalks Celery
1 Red Bell Pepper
1/4 small Red Onion
2 cups Parsley, leaves and stems, roughly chopped and packed into the measuring cup
1 Lime

Calories: 250, Protein: 12g, Fiber: 2g

Great Green Fruity Mix

2 cups Beet Greens, Red Swiss Chard, Kale, Spinach or a combination, roughly chopped and packed into the measuring cup
1 Golden Delicious Apple
1/2 Comice Pear
10 Strawberries, green tops cut off
1 cup Coconut Water

Calories: 255, Protein: 6g, Fiber: 3g

Juicing

Great Greens Juice

2 Green Apples
2-3 cups Spinach
6-8 leaves Swiss Chard
1 Cucumber
4 stalks Celery
1/2 Fennel Bulb
1 bunch Basil

Calories: 329 kcal, Protein: 16g, Fiber: 2g

Green Juice

6 leaves Kale
2 cups Spinach
1/2 Cucumber
4 stalks Celery
2 Apples
1" Ginger root

Calories: 180, Protein: 12g, Fiber: 1g

Green Lemonade

1 Green Apple
3 handfuls Spinach, 1.5 cup
6-8 Kale leaves, 2 cups
1/2 Cucumber
4 Celery Stalks
1/2 Lemon

Calories: 210, Protein: 10g, Fiber: 1g

Lemon Lime

1 Lemon
1 Lime
2 Asian Pears
2 Green Apples
2 Carrots
1 Piece Ginger (thumb sized)
2 cups Purple Cabbage

Calories: 410, Protein 7g, Fiber 1g

Mexican-Style Jugo

2 large Cucumbers
4 cups Cilantro, leaves and stems, roughly chopped and packed into the measuring cup
1 Lime
1 Poblano Pepper, ribs and seeds removed
1 Golden Delicious Apple

Calories: 200, Protein: 8g, Fiber: 2g

Minty-Fresh Berry

2 cups Blueberries
2 Kiwi Fruit
16 Strawberries
2 cups Mint leaves, packed into the measuring cup

Calories: 319, Protein: 5g, Fiber: 4g

Juicing

Purple Power Juice

6 cups Concord Grapes
1 Golden Delicious Apple
2, 2 x 2" pieces Ginger
1/2 cup Blackberries

Calories: 480, Protein: 4g, Fiber: 1.5g

Refreshing Fennel-Pear

2 Comice Pears
2 medium Fennel Bulbs

Calories: 306, Protein: 7g, Fiber: 3g

Spinach-Fennel-Cucumber

1 Fennel Bulb
1 Cucumber
3 Celery Stalks
3 cups Spinach

Calories: 170, Protein: 10g, Fiber: 1g

Sunset Blend Juice

1 large Sweet Potato
1 medium Carrot
1 Red Bell Pepper
2 large Red Beets
2 Golden Delicious Apples
1 Orange, optional

Calories: 436, Protein: 9g, Fiber: 2g

Sweet N Tart Citrus

3 cups Cranberries
2, 2 x 2" pieces Ginger
3 Oranges
2 small Ruby Red Grapefruit
2 Limes

Calories: 500, Protein: 7g, Fiber: 9g

V28

3 large Red Beets
2 medium Carrots
2 stalks Celery
4 Plum Tomatoes
4 cups Parsley, leaves and stems,
roughly chopped and packed into the
measuring cup
1 Jalapeno, ribs and seeds removed
12 Red Radishes

Calories: 340, Protein: 17g, Fiber: 2g

IN THE KITCHEN

Recipes

Antioxidant Smoothie Bowl

½ c Organic Frozen Wild Blueberries
½ c Organic Frozen Strawberries
½ organic frozen banana
1 small avocado
1 c Fresh Kale
2 TB Pepitas
1c Coconut yogurt
1 tsp Fresh ginger root
½ tsp Matcha
½ tsp Macha powder
1 serving Pea Protein Isolate
½ tsp each Lions Mane, Cordyceps, Reishi

Mix all ingredients in blender except Pepitas and blend until smooth. Pour into smoothie bowl and top with pepitas and a few fresh/frozen berries.

Pumpkin Protein Smoothie Bowl

¼ c Organic pumpkin puree
½ c frozen riced cauliflower
1 serving protein powder (collagen, whey isolate, or pea isolate)
1 TB Organic cacao powder
½ tsp Macha powder
¼ tsp Ashwaghandha 3
Organic Medjool Pitted Dates
¼ - ½ tsp pumpkin pie spice
Pinch of Redmond's Sea Salt
2 TB Nuttzo or almond butter
½ tsp grated Ginger root
Vanilla extract or vanilla stevia
¾ c unsweetened almond/cashew/coconut milk
1/3 c ice (sweeten w/ liquid Stevia to taste if needed)

Put all ingredients in the blender adding the ice last and blend until smooth. Pour into bowl and top with dried coconut flakes, sliced almonds, raw cacao nibs or a dollop of coconut yogurt.

IN THE KITCHEN

Blueberry Bash Protein Smoothie Bowl

½ c organic frozen wild blueberries
½ c organic frozen riced cauliflower
1 c organic frozen zucchini chunks
1 serving vanilla plant protein or collagen
¾c unsweetened almond/cashew/coconut milk
1 tsp Ceylon cinnamon
1 pinch redmonds sea salt
(add 1/3c ice if needed for thicker consistency)

Place all ingredients in blender, adding ice last if needed to thicken, blending until smooth. Pour into bowl and top with 2TB unsweetened coconut flakes, organic hemp seed, cashews, cocoa nibs, cashew/sunflower seed butter or berries.

Keto Protein Breakfast Waffles

1 large organic cage free Duck or Chicken egg
1 serving (about 20g) Organic Grass Fed whey isolate, (or Organic Pea protein isolate)
½ tsp aluminum-free baking powder
3 TB organic coconut/cashew/almond milk
Dash of redmonds sea salt
1 tsp Cinnamon

Mix all ingredients together until smooth while warming up waffle iron on med heat (3/5). Spray lightly with avocado or coconut oil. Pour evenly through the iron and close. Cook til done or green light comes on. Top with a little bit of Ghee, cinnamon & allulose, or 1-2TB Lankanto monkfruit “maple syrup”, organic unsweetened nutbutter of choice or 1/4c berries.

Calories (w/o ghee, syrup or toppings): 193, Protein: 31.4g, Carbs: 4.6g, Fiber: 1.4g, Fat:5.7g

Red Veggie FlatBread

1.5c Organic Pumpkin puree
2 large red bell peppers, chopped
5c yellow summer squash
1c ground flax seeds
4 tsp paprika
2 tsp redmond’s sea salt
1 tsp crushed red pepper flakes
1 TB spices
1 tsp xanthum gum

Mix all ingredients in food processor (or substitute approximately 6 cups of leftover fruit and veggie pulp from juicing). Blend until smooth. Spread onto parchment paper and place in dehydrator for 10-12 hours @ 110 degrees.

IN THE KITCHEN

Makes 6 servings. Calories: 168, Protein: 5.8g, Carbs: 19g, Fiber: 10.7g, Fat: 8.6g.

“Hidden” Veggie Breakfast Muffins!

2c leftover fruit/veggie pulp from juicing
1c unsweetened applesauce
8 servings pea protein isolate or collagen protein
1 TB cinnamon ½ tsp redmonds sea salt
1 tsp aluminum free baking powder
1 c organic almond butter, Nutzo, or sunflower seed butter
2 c organic liquid egg whites
1c organic coconut flour (or more depending on consistency and protein powder used)

Mix all ingredients and blend until smooth. Pour into muffin tin lined w/silicone cups and bake at 350 for 20-30min or until toothpick comes out clean.

Calories: 195 Protein: 15g, Carbs: 24, Fiber: 6+ depending on pulp, Fat: 6g

Strawberry Basil Chicken Salad

2c Organic Spinach Leaves
6 large Organic Strawberries Sliced
2 TB fresh Basil leaves chopped
3 oz grilled organic boneless skinless chicken breasts
½ sm avocado sliced
¼ - ½ c chopped fennel

Italian Protein Pasta and Veggies

1 sm box Banza chickpea pasta
½ jar Roasted red peppers sliced (in water not oil)
6oz organic grape tomatoes sliced in ½
8 organic mini sweet peppers sliced
½ (14oz) can organic pitted black olives
½ pkg fresh organic basil leaves diced
½ pkg fresh organic oregano leaves, diced
½ organic red onion, diced
2 TB Red wine vinegar
1 TB organic avocado or olive oil
½ tsp redmond’s sea salt
½ tsp black pepper
1-2 diced garlic cloves (½ tsp garlic powder)

Cook chickpea pasta as directed, rinse, and drain. Mix in large bowl, chickpea pasta, and diced veggies, spices, herbs, oil, and vinegar. Mix well and refrigerate. Let marinate a few hours before serving.

IN THE KITCHEN

Nutty Turmeric Stir Fry

1 TB avocado oil
3 garlic cloves, minced
1 leek, diced
2 c portobello mushrooms, sliced
1 head of broccoli, sliced
1 red bell pepper
1 yellow bell pepper
1 orange bell pepper
½ tsp redmond's sea salt (or Himalayan sea salt is fine)
Black pepper to taste
1 ½ lbs organic turkey or chicken breast, chopped in 1-2 inch pieces

Sauce:

3 TB Organic Creamy Almond Butter
½ lemon
1 TB coconut aminos
½ c hot water
¼ tsp turmeric powder (or ¾ tsp fresh grated turmeric root)
(optional 1/8 tsp ground ginger or ½ tsp fresh grated ginger root)

Rice: 1 c sprouted brown rice, or black rice OR Can substitute for 3-4c Riced Cauliflower

Nutty Turmeric Stir Fry (continued):

Instructions:

- Heat avocado oil in a large pan over medium heat, add garlic and leeks, stirring until soft.
- Next add diced chicken or turkey breast until fully cooked and no longer pink in the middle.
- Then add mushrooms, sliced peppers, broccoli, stirring until well mixed. Add cover and simmer about 5 min or until vegetables are slightly soft.
- In a separate bowl, add almond butter, coconut aminos, turmeric, ginger, lemon juice, and hot water, salt and pepper, whisking until combined and let sit - In a separate pot, add rice according to directions, or riced cauliflower with a little water and pinch of salt.
- Whisk the almond butter and coconut aminos mixture if settled and pour over chicken and vegetables, mixing well.
- Serve over rice or cauliflower rice.

IN THE KITCHEN

Paleo Burgers

1 lb lean organic ground chicken, turkey, liver, or lamb
1 lb 93% or leaner organic ground beef
1 TB coconut oil or good quality animal fat (optional)
1 red or sweet onion sliced in rings
Pinch redmond's sea salt
Pepper to taste
½ tsp garlic powder
½ tsp onion powder
½ tsp dried parsley (2 TB fresh)
1-2 TB brown mustard
1 tomato, sliced
4 pickles, sliced
Sauerkraut or Kimchi
8 Butter lettuce leaves

Place ground meat in bowl or food processor, with sea salt, onion powder, garlic powder, parsley, mustard and black pepper and mix well. Shape into roughly 8, 4oz balls and press into patties. Melt coconut oil in large frying pan over med heat and cook for 3-5min on each side (or grill). Serve with Butter leaves as "Buns" and top with onion, pickles, tomato slices, with Sauerkraut or Kimchi on the side.

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IARC Monographs Volume 112: evaluation of five organophosphate insecticides and herbicides

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