

DR. TODD PESEK SUPERFOODS PYRAMID

Leafy Greens—Most Nutritive Super Food!

- Your ancestors ate about 6-7lbs of green leaves per day, its no wonder your health is inextricably intertwined with green leaves.
- Pound for pound, calorie for calorie, these are the MOST nutritive Super Foods in existence.
- They are a rich source of minerals (including iron, calcium, potassium, and magnesium) and vitamins, including vitamins K, C, E, and many of the B vitamins.
- Excellent source of folate, a B vitamin that helps reduce risk of birth defects.
- Loaded with chlorophyll and bio available vitamins and minerals they are highly nutritive, alkalizing and detoxifying.
- They also provide a variety of phyto nutrients including beta-carotene, lutein, and zeaxanthin, which protect our cells from damage and our eyes from age-related problems, among many other effects.
- In addition to chlorophyll, perhaps the superstar nutrient in greens is vitamin K. Recent research has provided evidence that this vitamin may be even more important than once thought (the current minimum RDA is likely grossly inadequate) and many people do not get enough of it.

Vitamin K:

- Regulates healthful blood clotting
- Helps protect bones from osteoporosis
- Helps prevent and possibly even reverse arterial disease/atherosclerosis by reducing calcium in arterial plaques
- Is a key modulator of healthful inflammation, and helps protect us from inflammatory diseases including arthritis
- May help prevent and reverse diabetes

Green Leafy Superstars:

- Kale—phytonutrients, chlorophyll, vitamin K, indoles, lutein and the list goes on and on!
- Cabbage—phytonutrients & sulphur compounds very important for detoxification and maintaining vitality!
- Mesclun—phytonutrients, chlorophyll and the list goes on!
- Arugula—phytonutrients & sulphur compounds very important for detoxification and maintaining vitality!

Rainbow Veggies & Rainbow Fruits—Plant Pigments, Antioxidants and the list goes on!

- Eat the rainbow everyday.
- Twice as many veggies as fruits.
- Fruits by themselves and on an empty stomach.
- People who eat copious amounts of fruits and vegetables as part of a healthful diet reduce risk of chronic diseases, including diabetes, arterial disease (which leads to high blood pressure, heart attack and stroke), and some types of cancer.
- Why eat the rainbow every day?
- A diversity of antioxidants and plant pigments and all the benefits these phytochemicals bring!"
- The "indoles" a type of phytochemical in broccoli, cauliflower, cabbage and other cruciferous vegetables like kale helps to protect against some types of cancer.
- They are rich in antioxidants which boost the immune system and lower cholesterol. And, eating foods high in antioxidants may slow the aging process as well.
- Slow the aging process, how?
- By minimizing damage from free radicals that injure cells and damage DNA. Antioxidants can take away the destructive power of free radicals. By doing so, antioxidants prevent and reverse some serious disease processes.
- They also provide a variety of phyto nutrients including beta-carotene, lutein, and zeaxanthin, which protect our cells from damage and our eyes from age-related problems, among many other effects.

Daily Rainbow

- Red's are colored by plant pigments called "lycopene" or "anthocyanins." For example, lycopene in tomatoes, watermelons, beets, and pink/red grapefruits, helps to reduce risk of several types of cancer, in particular prostate cancer.
- Red's and Purple's are colored by plant pigments called "anthocyanins." For example, they abound in blueberries, blackberries and even some red's like strawberries, raspberries, red grapes and other fruits and vegetables which act as powerful antioxidants that protect our cells from damage, promote healthful aging, and heart health. And, they help reduce risk of cancer, stroke and heart disease.
- Orange's and Yellow's are colored by plant pigments called "carotenoids." Beta-carotene in sweet potatoes, pumpkins and carrots is converted to vitamin A (which is a hormone not a vitamin) that maintains healthy mucous membranes and healthy eyes. It works in concert with vitamin D at promoting a healthy you. Research has shown that plant-based carotenoids help reduce risk of cancer, heart disease and can improve immune system function.
- Green's (leafy and otherwise!) are colored green by "chlorophyll." Chlorophyll is the supreme superstar nutrient as it is deeply nutritive, detoxifying and alkalinizing—all integral to healthful physiology and the prevention of disease.
- Green veggies and dark leafy greens like green peppers, peas, cucumber, celery and spinach, contain lutein. Lutein works with another phytochemical called, zeaxanthin, which is found in corn, red peppers, oranges, and grapes helps to keep the eyes healthy. Together, these phytochemicals reduce risk of cataracts and age-related macular degeneration, which can lead to blindness.

Rainbow Veggie Superstars:

- Onions—thiosulfinates, sulfides, sulfoxides, all important for detoxification and the maintenance of vitality!
- Garlic—allicin (this is more concentrated with greater surface area exposed and it is degenerated by heat—so chop it small/smash it and eat it raw) an important antimicrobial, and, diallyl sulfides important for detoxification and the maintenance of vitality!
- Celery—natures electrolyte repletion, healthful salts!
- Peppers—capsaicin (the spicy ones!) and lutein and zeaxanthin which support healthful circulation and eye health!

Rainbow Fruits Superstars:

- Blueberries—Studies have shown that eating more blueberries is linked with improved memory function, and healthy aging. And, they help to promote healthy sugar metabolism (anti-diabetic action, specifically anti glycation).
- Bananas—nutritious and delicious!

Balanced Proteins—Building Blocks of Life!

- Protein is an essential part of our diet as it provides amino acids which are the building blocks of proteins, enzymes and thus life! Some amino acids we produce in our bodies, but others have to come from our food, these are called essential amino acids. A diet, which contains a variety of plant-based protein sources, is ideal because a single protein source usually does not have all essential amino acids. When a protein contains one of the essential amino acids at a lower level than we need, that amino acid is said to be limiting in that protein source. The amino acid lysine is the limiting essential amino acid in corn, wheat and rice (cereal grains) whereas legumes are limiting in tryptophan.
- Increased need for proteins with active lifestyle, and activity is essential, try brisk walking, swimming, trail running, yoga, or tai chi!
- Loaded with the building blocks of life, or amino acids, fiber and bioavailable vitamins and minerals they are highly nutritive, alkalinizing and detoxifying.
- Plant based proteins are tremendously bioavailable and have ZERO cholesterol!
- Try soaking and sprouting the gamut of legumes, add them to soups (hot and cold), salads, dips, spreads and eat them good and raw. The sprouting process activates the enzymes within the seed and this process of life uses up the carbohydrates and sugars in the seed leaving only protein, fiber, phytochemicals, vitamins, minerals and living enzymes for your healthful sustenance!

Superstars:

- Legumes—sprouts, sprouts, sprouts! Seeds of life!
- Quinoa— a plant native to South America that has been consumed for millennia by the Inca and their predecessors, is a Superstar Superfood because of its high total protein level (~20%) and its awesome balance of essential amino acids. Quinoa is not a cereal grain, but is the seed of *Chenopodium* sp. or Goosefoot.

Amino Acids and protein in Quinoa	
Essential Amino Acid	Quinoa mg/g protein
Methionine + cystine	21
Lysine	51
Tryptophan	8
Valine	45
Threonine	30
Phenylalanine + tyrosine	74
Histadine	25
Isoleucine	37
Leucine	64

Ruales & Nair, Nutritional quality of the protein in quinoa (*Chenopodium quinoa*, Wild) seeds. *Plant Foods for Human Nutrition* 42: 1-11, 1992.

Omega 3 Fats—Anti-inflammatory!

- You might have heard about essential fatty acids, or Omega 3, 6, and 9. Your ancestors ate them on a ration of about 1:1, Omega 3:Omega 6 and 9. They balance one another out, an important balance since Omega 3 are anti-inflammatory and anti-cancer whereas Omega 6 and 9 are pro-inflammatory. These are consumed in the modern day at ratios of about 1:20, Omega 3:Omega 6 and 9. So the modern diet has people walking around in perpetually pro-inflammatory states which spawns disease including pathologies such as cancer.
- It is important that we understand the majority of cases of morbidity, or disease, simply need not exist. Their causes are totally preventable. And, if present, they are reversible.
- Diseases of civilization such as diabetes; arterial disease which leads to high blood pressure, heart attack and stroke; diabetes; the gamut of autoimmune diseases; and inflammation which leads to cancer and other pathologies are manifestations of choices we make on an ongoing basis—choices which spawn chronic inflammation which then leads to these pathologies. ***This inflammation is preventable/reversible with Super Foods, in particular with Leafy Greens and Omega 3.***
- A diet rich in Omega 3 reduces the risk of heart disease, and people who eat copious amounts of Omega 3 rich Superfoods are less likely to die of a heart attack or stroke—plain and simple!
- Omega 3 may protect cardiovascular health by reducing the stickiness of platelets, improving the health of blood vessels, lowering blood pressure and preventing arrhythmias as well.
- Omega 3 have been proven to lower triglycerides and blood cholesterol levels.
- People on the Mediterranean diet have higher levels of HDL, or good cholesterol. This benefit may be explained by the fact that the Mediterranean diet is naturally high in Omega 3.
- Omega 3 may improve mild symptoms of menopause, such as hot flashes and breast tenderness.
- Omega 3 may also help prevent or relieve symptoms of attention deficit hyperactivity disorder, or ADHD.
- Omega 3 may help protect against or treat dementia, Alzheimer's disease, diabetes, rheumatoid arthritis, inflammatory bowel disease, asthma, bipolar disorder, depression and schizophrenia.

Superstars:

- Flaxseeds and Flaxseed oil, is rich in alpha-linolenic acid (ALA), an essential fatty acid that is a precursor to omega 3 fatty acids. ALA is converted in the body to Omega 3. Like most plant-based oils, flaxseed oil is unsaturated and healthy for the heart.
- Chia is an edible seed that comes from *Salvia hispanica*, a member of the mint family that grows abundantly in deserts of southern Mexico. They have been consumed as a Superfood for millennia. They were a main component of the Aztec and Mayan diets and were given as survival rations to Aztec warriors
- Chia is very rich in Omega 3, even more so than flax seeds.
- Chia is also rich in antioxidants, fiber, calcium, phosphorus, magnesium, manganese, copper, iron, molybdenum, niacin, and zinc.
- Chia stabilizes blood sugar and thus is a great superfood for use in prevention and reversal of diabetes.
- Chia forms a gel with water and makes a easy, nutritive energy food!

Functional Foods & Green Tea

Lots more of these, here are a few!

Maca. Maca is the powdered root of the *Lepidium peruvianum* Chacon plant. This super food is grown in the high Andes in Peru. It is packed with vitamins, minerals, proteins, complex alkaloids and other beneficial phyto chemicals. Dried maca is highly nutritious being approximately 60% carbohydrates (starches and sugars), 9% fiber, and slightly more than 10% protein. It has a higher lipid (fat) content than other root crops (2.2%), of which linoleic acid, palmitic acid, and oleic acid are the primary fatty acids.

Maca is also a rich source of plant sterols, including sitosterol, campesterol, ergosterol, brassicasterol, and ergostadienol. From a mineral standpoint, Maca exceeds both potatoes and carrots in value, and is a source of iron, magnesium, calcium, potassium, and iodine. It is known to support healthful awareness, memory, clarity, stamina, thyroid function, hormonal balance, and physical energy.

Cacao. Yes, chocolate! Chocolate is made from the dried seeds of a tree which grows in the rainforest (*Theobroma cacao* of the family Malvaceae). Cacao is known to be one of the highest dietary sources of magnesium & contains an impressively high iron content. Cacao has more antioxidant flavonoids than most green teas! It also helps to support healthful circulation, contains Serotonin (which acts in our brain similarly to an anti-depressant), Phenylethylamine (feel good neurotransmitter in our brains which contributes to our feelings of LOVE!), Anandamide, (which facilitates relaxation and blissful feelings), sulfur, calcium, zinc, copper, is source of folic acid, vitamins A, E, K and potassium.

All of this supports healthful blood pressure, healthful aging and mood, and supports an healthful immune system response. It also increases alertness and awareness. The closer to the raw form of cacao powder you can get, the more nutrients and better effects you will have. So, no, eating highly processed chocolate bars will not provide all of the above benefits (and besides they are loaded with sugar!). Go with the raw or dark chocolates!

Matcha is green tea leaves in powder form. It is uniquely Japanese and is the highest quality tea available in Japan. One glass of matcha is the equivalent of 10 glasses of green tea in terms of its nutritional value and antioxidant content.

Matcha is full of cancer fighting antioxidants and no, not all antioxidants are the same. The antioxidants in Matcha are in the family called catechins (which are only found in green tea) and of that family, Matcha contains EGCG, which contain the most cancer fighting properties. 60% of the antioxidants in Matcha are

EGCG's.

As if that weren't enough, Matcha also contains chlorophyll which is good for detoxification and purification, and L-theanine, an amino acid known to promote healthful mood and feelings of wellbeing.