A Healthy Diet

Whole Foods Plant Based (WFPB)

....and other science based recommendations for living a long healthy life.

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The health of the American public is deteriorating in an alarming fashion. The rates of obesity, diabetes, heart disease, stroke, dementia, male impotence, autoimmune disease, osteoporosis, and cancer of all sorts are staggering. We continue to develop more expensive medicines and procedures to keep people living a short while longer in misery with these conditions.

For years the cause has been eluding us, but certain researchers have done some pioneering work and have fearlessly spoken out. But, since their evidence strongly conflicts with established wisdom, they have been ridiculed and marginalized by all of us.

The US government agencies that are charged to provide us with official health advice have failed in their duty to objectively evaluate scientific evidence and give us unbiased information. This is because people who make up these agencies have strong financial ties with the dairy and meat industry that desire any information about the deleterious effects of animal products in our diet to be suppressed.

Scientific evidence is substantial that indicate consuming animal protein is the primary underlying cause of the degenerative conditions that I previously listed. This includes low fat milk, cheese, eggs, and fish! Well -recognized risk factors of cardiovascular disease are: smoking, high blood pressure, diabetes, elevated cholesterol and family history. A far more potent risk factor than all of these is the consumption of animal protein. Animal protein has also been shown to be a strong carcinogen.

Defining a Whole Foods Plant Based (WFPB) Diet

Whole foods means un-processed food. If the fiber is removed it is processed. Examples:

- Fruit vs. fruit juice: Eat all the fruit you want. Drink whole fruit smoothies, but not juice. Blood sugar is reduced in diabetics if they eat whole fruit. It is elevated by fruit juice.
- Brown rice vs. white rice: Only whole grains, no white rice, white flour, or regular pasta. Pasta made from whole wheat, beans or other unprocessed foods is good. Alternative unprocessed grains such as quinoa, amaranth etc. are good. Potatoes and corn are good. Potatoes fried in oil.... not so good. Sweeteners made from corn...terrible.
- Olives vs. olive oil: Eat all the olives you like, but minimize olive oil. Olives contain fiber, oil does not. Vegetable oil is better than animal fat, but try to minimize this processed food. Saturated plant fats such as coconut and palm oil are worse than other plant oils, they are nearly as bad as animal fats. Because they are plants, they do not contain cholesterol, but they will still cause a rise in your cholesterol level. Purchase an air fryer to fry your foods with minimal canola oil. Limit fried foods.
- *No sugar or artificial sweeteners.* If you want something sweet eat whole fruit or cooked sweet potatoes. The more the better! Do not add *any* sweeteners to your coffee or tea or other drinks.

Plant-based (or Vegan) means avoiding all animal products. Dairy products and eggs may even be worse than meat because they contain hormones and growth factors meant to boost the growth of infant animals. They are not suitable for adults. Fish and chicken are just as bad as pork and cow. Minimize any consumption of these.

Benefits of WFPB Diet:

Promotes normal weight. Prevents Acne. Prevents all types of cardiovascular disease such as heart attacks, stroke, dementia, impotence, (men who are obese (BMI>30) have impotence rates similar to normal weight (BMI<25) men 20 years older than they are), peripheral vascular disease. Prevents cancer. Prevents autoimmune disease such as juvenile diabetes, MS, rheumatoid arthritis, psoriasis, lupus and many others. Basically, most of the chronic health conditions that people in wealthy counties suffer from are directly related to our poor diet.

We eat poorly and don't exercise and then engage in wishful delusional behavior with the encouragement of our doctors that taking a few pills can solve these problems. The evidence suggests that this is not effective.

OSTEOPOROSIS

Of particular interest to me as an orthopedic surgeon is the cause of osteoporosis. There is powerful evidence to suggest that animal protein consumption causes osteoporosis. Yes, drinking milk causes osteoporosis! This is a staggering public health problem in the US. As people age, they lose bone mass and become crippled and die because of repeated fractures. Two common examples are spinal compression fractures and hip fractures. Spinal compression fractures heal without much medical intervention, but the compressed vertebrae often cause chronic back pain and repeated fractures often cause seniors to acquire a permanently stooped-over appearance. Hip fractures almost always require surgery, but despite this, approximately 30% of patients are dead within 1 year from complications of this dread disease. Others lose their independence and end up in nursing homes for the rest of their life, resulting in much personal tragedy not to mention substantial cost.

We now have many effective drugs to reverse osteoporosis and decrease the risk of further fractures. Drugs have side effects, but on balance these drugs do more good than harm. But I was always mystified why increased calcium consumption has never correlated with prevention or reversal of osteoporosis. For decades, physicians, osteoporotic foundations, industries, and governments have advocated for calcium consumption to prevent osteoporosis, often emphasizing the essentiality of dairy consumption to meet dietary recommendations for musculoskeletal health (Weaver et al., 1999; Langsetmo et al., 2015). Following this logic, countries with the lowest consumption of dairy products should suffer the greatest burden of fractures (indicative of osteoporosis). However, the opposite holds true (Hegsted, 1986). While the per capita consumption of dairy in the United States, Australia, New Zealand, and Western Europe exceeds 300 kg per year, the rate of hip fractures is significantly greater in these countries than in Asian and African countries, where consumption ranges between 10 and 30 kg per year (Hegsted, 1986). On a global scale, dairy consumption and hip fracture rates are *inversely* related (Hegsted, 1986). The same trend exists with calcium consumption and hip fracture rates (Hegsted, 1986). Also, the greater the ratio of animal protein to plant protein consumption, the greater the incidence of fractures (Frassetto et al., 2000).

Migration studies further illustrate this "calcium paradox" (FAA and WHO, 2004), where communities consuming more calcium also suffer from more osteoporosis. African Bantu women, consume on average approximately 1/3 of the United States Recommended Daily Allowance of calcium, without dairy and/or supplementation. Osteoporosis, however, is virtually nonexistent in the Bantu population. When Bantu women migrate to western countries and adopt western diets, rich in calcium and animal protein, osteoporosis simultaneously emerges (Walker, 1965)

Human and other animal studies have shown that the rate of urinary calcium excretion is directly related to the amount of animal protein consumed. It's hard to believe, but drinking milk actually leaches calcium out of our bones! We all believed the common-sense recommendation that milk made our bones strong, but when confronted with the facts that milk consumption has never been shown to improve bone density and that it causes higher calcium loss, we would expect that the USDA would alert the public to this fact, and put a warning label on dairy products just like they do on cigarettes. Dairy products are actually carcinogens and likely cause osteoporosis. The USDA has totally lost my trust.

The myth that consuming more dairy products is important to maintain healthy bones has been promoted by the dairy industry for obvious reasons without a bit of scientific evidence to support it. The highly dubious supplement industry promotes calcium pills in the same fashion, again without any evidence to back it up. Furthermore, evidence exists that correlates increased calcium consumption with heart disease. The USDA should protect us from this nonsense, but they have deep financial ties to these industries and are ethically too compromised to objectively analyze the scientific information. The fact is that a Whole Foods Plant Based (WFPB) diet prevents osteoporosis. To date I know of no evidence that indicates that this diet can reverse osteoporosis; but this study should be done.

To prevent and to attempt to reverse osteoporosis, I would now advise a WFPB diet. I would still recommend bone-strengthening medications temporarily in all patients who have certain DEXA scores (bone density values) having hip surgery to prevent fractures in the high-risk period of 6 months after surgery. In patients who have osteoporosis I would still recommend several years of bone strengthening medication, until evidence emerges that a WFPB diet can correct osteoporosis. Further measures that improve bone density are regular impact exercise (running and jumping), Consuming adequate Vitamin D (to achieve blood levels above 50 ug/L), to avoid smoking and avoid drinking alcohol in excess.

DEGENERATIVE ARTHRITIS

As on Orthopedic surgeon specializing in joint replacement, I enjoy returning people back to maximum function. My professional reputation and income are directly related to how good a job I do surgically correcting end stage degenerative hip and knee disease. I have pioneered hip resurfacing as a more functional and durable type of hip replacement. I am working on techniques to improve the outcome of total knee replacement as well. There is no evidence that cartilage can be restored by diet. On the other hand, obesity is a major cause cartilage destruction (severe knee arthritis) and to a much lesser degree hip arthritis. Knee replacement rates in the US are skyrocketing as a direct result of the American obesity epidemic. Knee and hip replacements in the obese have a higher failure rate. If we could eliminate obesity by consuming a healthy diet, health costs and mortality rates would plummet.

LOOSING WEIGHT

A Body Mass Index (BMI, = [weight in lbs.] \times 703/ [height in inches]²) is a simple and reasonably accurate way to determine if a person's weight is healthy. A lean but very muscular man would have a BMI suggesting obesity. But most men who claim muscles are the cause for their elevated BMI are kidding themselves. They should get a DEXA scan which is the most accurate way to determine body fat (<15% is considered normal). BMI scores

•	< 18	underweight
•	18-25	normal
•	>25	overweight
•	>30	obese
•	>35	severely obese
•	>40	morbidly obese

Calculate the target weight you need to reach to achieve a certain BMI by rearranging the formula:

Target weight = Target BMI x [height in inches] $^2/703$

Any BMI over 25 increases your risks for surgery. The higher the BMI, the higher the risk. Any amount dropped is beneficial. If you want to decrease your risk, lose weight. It will make the surgery technically easier for the surgeon, increasing the chances that the outcome will be optimal. Also, it will decrease the chance of infection, blood clots and many other complications that are inherent in hip and knee replacement surgery.

The WFPB diet is the healthiest way to lose weight. We are inundated with too numerous to count diet gimmicks and fads, even pills and weight loss surgery. Basically, fat is an energy storage battery. We must consume less than we burn off by basal metabolic rate (BMR, energy it takes our body to run its basic functions) and activity. Some people are fortunate to have high BMR and can eat more without gaining weight. But anyone can become slim by consuming a healthy diet and exercising regularly. If you have severe enough arthritis limiting vigorous exercise capacity, you can still lose weight by adopting a healthy diet. Diet typically accounts for 80% of weight loss. Types of Diet include:

- o High fat/low carb diet: Keto, Adkins, paleo: effective way to lose weight, but very unhealthy and unsustainable.
- Calorie restriction diet: weight watchers: also effective, but starving yourself long term to burn off fat reserves is mentally very challenging and most people cannot maintain this and then feel like failures.
- WFPB diet allows eating until you are full and has numerous health benefits discussed previously.

In the United States, vegan diets are the only dietary patterns associated with a healthy weight. This may be a result of several factors. Firstly, plant-based diets naturally rev up your metabolism; individuals on a plant-based diet average an 11% higher resting metabolic rate than those on a conventional American diet. Additionally, vegetarians typically consume 364 - 464 fewer daily calories than meat eaters without consciously calorie counting. There is also accumulating evidence demonstrating that not all calories are created/processed equally. When comparing groups of people who consume the same amount of daily calories, those who consume meat gain significantly more weight.

If you are interested in exploring the health benefits of a WFPB diet I suggest the following sources:

1.) The China Study T. Colin Campbell Ph.D.

the best scientific evidence that is available on the subject. It is very readable; you don't have to be a scientist to understand it. This book provides strong scientific evidence for the connection between animal protein consumption and many of the chronic degenerative conditions that people living in wealthy nations suffer from

A good friend, who is not a scientist, asked me to read this in September 2015 and give him my opinion. It completely changed my view on nutrition. I was very grateful to him and was somewhat embarrassed that as a doctor I had not been the one to give him the book to read. Previous to reading the evidence, I was a proponent of a healthy diet of organic lean meats and fish, vegetables, whole grains and healthy plant oils and avoidance of processed foods and all sweeteners including artificial ones. Basically, this is the "Mediterranean diet". This is better than the Standard American Diet (SAD), but is clearly not good enough. In October 2015 my wife and I took the plunge into a WFPB diet. One of our four grown children had already been a Vegan for 1 year, 2 others have also converted.

2.) Dan Buettner The Blue Zones: Lessons for Living Longer From the People Who've Lived the Long

Describes the healthiest known naturally occurring populations in the world and analyzes their healthy lifestyle choices.

3.) Forks over Knives documentary available on Netflix

This gives an excellent overview of the subject, and features Drs. Campbell and Esselstyn.

4.) John Mackey CEO Whole Foods

A good basic overview of the whole food plant-based diet and its rationale are given in his book "**The Whole Food Diet**". Recipes are included as are references for more reading. I suggest this for you first introductory book on this topic.

Also, you can watch Mr. Mackey lecture on this topic online:

https://www.drmcdougall.com/health/education/videos/advanced-study-weekend-experts/john-mackey-the-whole-foods-diet/

Mr. Mackey is an inspiring business leader who is the co-founder of Whole Foods Market, a very successful chain that is growing rapidly in the US. More and more Americans are convinced that eating better will improve their health. The problem is that much nutritional information from the media and the government is conflicting and inaccurate. At whole foods they provide healthier food and try to educate people about their choices. Mr. Mackey, who maintains a Vegan diet himself, admits that most foods sold at his Market are not healthy enough. His goal is to sell people what they want but to also educate them and gradually move them to healthier choices.

His one and a quarter hour lecture gives a good overview of what a healthy diet should be.

Whole Foods for years has been sending employees who are interested to weeklong clinics to learn WFPB diet. These are now available to the public through Whole Foods Market.

5,) John McDougal MD Health Clinics

https://www.drmcdougall.com

Book: The Starch Solution: Eat the Foods You Love, Regain Your Health, and Lose the Weightfor Good!

A dietary pioneer who offers extensive educational programs to learn the WFPB diet. You can access all his educational opportunities through his website, visit his clinic in Northern California, or order his book on this topic listed above.

6.) Drs. Caldwell Esselstyn and Dean Ornish

Dr. Esselstyn:

Prevent and Reverse Heart Disease: The Revolutionary, Scientifically Proven,

Nutrition-Based Cure

Dr. Ornish:

Dr. Dean Ornish's Program for Reversing Heart Disease: The Only System Scientifically Proven to Reverse Heart Disease Without Drugs or Surgery

Leading experts in using a stricter *low fat* WFPB diet to arrest and even reverse end stage heart disease. Drugs and cardiac procedures can only control emergencies and temporarily relieve symptoms. Cardiac disease continues to advance despite any known medical treatment. Drs. Esselstyn and Ornish are two doctors who have ever been able to demonstrate arrest of progression and even reversal of heart disease. Please read their books if you have heart disease or want to avoid getting it as you age.

7.) **Dr Michael Greger (nutritionfacts.org)** maintains a free searchable website on the health benefits of a whole food plant-based diet. For example, if you search the debilitating autoimmune disease Multiple Sclerosis (MS) you will find scientific evidence that consuming a WFPB diet is more effective than new powerful, expensive and dangerous "biologics" that target and knockout parts of our immune system. These drugs certainly work, but the side effects can be very dangerous and the long-term consequences are not known. Our immune system prevents cancer from developing, crippling the immune system with these drugs may have devastating late consequences that we may not discover for many years.

Also, I recommend Dr. Greger's book "How not to die".

8.) Doctors Wellness Center

2005 Beltline Blvd. Columbia SC 29204

803.782.4440

If you live in the Columbia area and have come to understand the importance of a WFPB Diet, but don't know how to get there on your own, consider contacting this group who may be able to help.

9.) Popular Cookbooks

Veganomicon

Isa Chandra Moskowitz

The Minimalist Baker's Everday Cooking

Dana Schultz

The Oh She Glows Cookbook

Angela Liddon

Search Amazon for many others

10.) Food Blog FROMMYBOWL.com

Easy vegan recipes using minimal oil.

11.) Nutritionist Nikola Hamilton, MSc. BEATIFYLIFE.com. My daughter is an expert in WFPB diet and has been one of the chief reasons that I converted to this diet. My wife and I have been fortunate to have access to her vast knowledge in this area for frequent consultation. Even after 4 years of embarking on this healthy eating project we are still learning new pearls from Nikola and when she visits we are treated to amazing vegan feasts. If you need a personal coach to help you in navigating a transition to a healthier diet, please consult her online. In my opinion, most nutritionists give poor advice because they are trained in traditional dietary dogma which is tainted by USDA misinformation. To achieve remarkable and sustainable health goals, access an expert who remains critical of food industry propaganda and up to date on the scientific literature. beatifylife@gmail.com www.beatifylife.com

I will close with a summary of the scientifically established essentials to maximize your chances for living a long healthy life:

· WFPB diet

If you need help, hire a WFPB nutritionist.

• Daily exercise should include:

If you need help, hire a trainer at a gym.

- o regular aerobic exercise to increase your heart rate to over 120 for at least 15 minutes (unless you already have a medical condition that makes this unsafe) and results in your clothes being soaked in sweat. This promotes cardiovascular health.
- o Resistance exercise, weight lifting to prevent muscle atrophy of aging.
- o Impact exercises. Pounding the bones makes them respond by laying down more bone.
- 8 hours of sleep prevents dementia, strengthens the immune system, etc. For more info please read Dr. Mathew Walker PhD "Why We Sleep".
- Maintaining Social Connections. Go out with friends, stay close with your family. This may be a chief reason many men traditionally get sick or die shortly after retiring from work. They suddenly loose most of their social connections.
- Don't drink to excess. The recommendations constantly change but it currently appears that for men one drink daily and for women none is the healthiest. If modest occasional drinking promotes social connections, it may be healthy on balance.
- Don't smoke or vape.
- Don't take supplements and vitamins. Except Vitamin B12 in Vegans and Vitamin D, they are a waste of money and may even do harm. Get all your vitamins and antioxidants naturally by eating colorful plants. Red wine is better than resveritrol. oranges are better than Vitamin C. Fish oil is unhealthy.

I hope these resources stimulate your curiosity to learn and understand how to eat properly to regain and / or maintain good health well into old age. While I can fix your hip or knee, taking care of the rest of your body will be up to you. The general health in the wealthiest country in the world with the greatest opportunities is deplorable. 90% of health care costs and a lot of pain and suffering would be eliminated if people just made healthy lifestyle choices.