Matt's Daily Health Guide

Below are some recommendations regarding health that I have developed over time as a result of extensive research into human health and our society; I have synthesized five months of intensive research including reading over a dozen books on health and diet. None of my recommendations is likely to cause you harm. All of them are likely to provide some level of benefit. If you have a concern, talk to your doctor. In fact, I recommend you put a plan in place on how you are going to implement change and discuss it in detail with your doctor.

My primary filter in doing this research is related to stress, and what I believe to be its massive negative impact upon all of us as a result of how our world has been reshaped over the last 100 years. Our world has been consciously re-engineered by businesses who are interested in generating profits for their shareholders. They use relentless advertising and mass media to create and change preferences in diet and lifestyle. They are never tiring in their efforts to cause you to desire the product they are trying to sell you. They have used their massive resources to co-opt the limited forces who are supposed to protect you (like the FDA, EPA, US Department of Agriculture, mass media, and medical establishment). They use sophisticated scientific methods and insights into psychology to gain the greatest influence over controlling your choices. And, they have no interest whatsoever in your health, because that is not the business they are in. They are interested in your wallet. They are not evil forces for the most part (I exclude the tobacco companies, some of the chemical companies, and some others). They are just exceptionally good at what they do. You need to understand this and act to counter their negative influence on you.

I believe we need to act as individuals to protect ourselves, since no one else is out there looking out for us, despite what the corporations of our society tell us in their advertising. And, educating ourselves in those things that determine our health is the first step.

Pretty much all of these recommendations involve fighting against the culture in which we live, in which we are constantly bombarded with messages to eat more, eat worse, to sit on the sofa, to buy a bigger car and drive further, to watch more television etc... Unless you move to the backwoods and avoid society, you can't get away from this bombardment. That means adopting these recommendations will be hard. No one will be supporting your efforts. Almost everything in your daily world will be opposing them. Your motivation will have to be internal. It is hard swimming upstream all of the time. And, efforts to continue doing things that are hard and not externally rewarded usually falter relatively quickly.

If you are to be successful, and long term success is what we are after, you need to be careful. You can't work so hard you exhaust yourself, because you will regress. You can't change too quickly, because quick change is painful for most people. You can't feel like everything is work and nothing is fun. You need rewards. So, don't follow all these recommendations. Pick a couple relatively easy ones (my suggestions are in bold

below). Implement them and feel satisfied that positive change is occurring and that the changes are integrated into your lifestyle. Then, pick a couple more. Work to gradually shape your habits and patterns in a more healthy direction. Be cognizant of the media messages you are subjected to and the influence they are having over you. Be cognizant of your stress level, and the changes in your behaviors that occur as a result of this stress. Have some fun with this. Knowledge is power.

Diet

General Rules Concerning Food Consumption

Foods to Eat

- Eat a diet that consists largely of whole foods, foods that have been minimally processed. Avoid foods served in boxes, in fast food restaurants, and from vending machines. Avoid the aisles in the middle of the grocery store, which is where the highly processed, high profit foods are located that are marketed so intensively by the food industry. Also, avoid foods that need a marketing campaign to overcome our body's wisdom in order to get us to eat them.
- When you eat a food, make sure you get both the energy and the nutrients. With apples, eat a small apple and eat the skin; the white interior is the energy, the skin contains the nutrients. Big apples are profitable when sold by the pound, which is why they have gotten so big. With grains, eat the starchy inner meat (energy), but also the bran, the germ, and the rest of the grain (fiber and nutrients). With orange juice, get juice with high pulp quantity the pulp has great nutrients and slows digestion. When eating a whole orange, eat some of the white stuff (which has extremely high levels of beneficial nutrients), and grind off some of the peel as well. Peel is incredibly good for you but needs to be washed thoroughly; it is great in salads, stir fries, and lots of other dishes. Industrialized foods contain almost always just the energy, and none of the nutrients, and are a huge contributor to obesity and chronic disease.
- Eat a diet high in vegetables and fruits, whole grains, lean meats and eggs, and seeds and nuts. This will ensure a diet containing a mix of complex (whole) carbohydrates, fats and proteins. These are all essential for health. Eat greater amounts of vegetables and whole grains, and moderate your intake of meats and fats. The combination of these food stuffs provides for better overall use of nutrients. For instance, many benefits of vegetables are lost if fat is not available to help the fat soluble nutrients be absorbed. So, add some avocado to your salad, and olive oil to your stir fry. Also, carbohydrates, even in whole grains, are absorbed too fast if fats and proteins are not present to slow down digestion. Whole grains should contain 6 grams of fiber per serving.
- Eat foods that are widely varied in colors. Most of the colors in plant based foods are phyto (plant based) nutrients that are tremendously beneficial and often have very strong antioxidant effects. Eat the skins of plants because the antioxidants are concentrated in the skin of the plant; that is where the plant interacts with oxygen in the air.

- **Eat organic, non industrialized animal products whenever possible**. Try to find grass fed meat; even many supermarkets carry it. Range fed cows will have 500% less saturated fat that feed lot raised cow. Eat eggs from animals that were served grass if possible. Drink organic milk. Avoid animal products from animals that were grown industrially (almost all of the foods you will find in a normal supermarket), having survived exclusively on corn, antibiotics, steroids, and hormones (Corn fed cows grow three to four times faster than grass fed ones, which is why almost all cows are corn fed, even though the animals are diseased and would die but for the unnatural supports). Industrialized agriculture creates toxic animals imagine your health if you ate nothing but corn, every day, which is increasingly becoming true (see below). Industrialized animal product are extremely high in saturated fats (fats solid at room temperature), which are the fats which lead to much cardiovascular disease, largely because they make your platelets sticky, which leads to clots and plaques. Chicken and turkey are low in fat
- **Eat organic vegetables and fruits whenever possible**. Try to avoid pesticides and other products of modern agriculture. It is difficult to prove scientifically that organic foods are healthier than foods produced conventionally. What you can prove easily, with the help of a mass spectrometer, is that organic foods contain little or no pesticide residues the traces of carcinogens, neurotoxins, and endocrine disruptors now routinely found in conventional produce. However, it is hard to prove that the relatively low levels of these toxins in our foods will make us sick. But, that does not mean that those poisons are not making us sick. And, it is prudent to assume that they might be contributing to us being sick (since most of us suffer from chronic diseases that were not present in large quantities prior to industrialized agriculture like allergies, autoimmune diseases, and heart disease) and avoid them. Remarkably little research has been done to assess the effects of regular exposure to the levels of organophosphate pesticide or growth hormone that the government deems tolerable in our foods.¹

(thus, less saturated fats). Beef (corn fed) and especially pork are very high in fat.

- Seek out foods that contain omega 3 fatty acids. Animal sources are primarily cold water, oily fishes, such as salmon, trout, tuna, mackerel, sardines and a few others. The main plant sources are dark leafy vegetables, some sea weeds, a few kinds of nuts like walnuts, and a few oils, primarily flax and hemp oils. Canola oil has limited amounts of omega 3 oils. Also, grass fed animals are relatively rich sources of omega 3's, as they have eaten the dark leafy vegetables. Buy some flax oil (found on the internet) and use it in salads, as a substitute for butter on bread, and in any non-cooking use that you would use olive oil for. Flax oil is the best source of omega 3 fatty acids available. Do not cook with flax oil. It turns rancid quickly when exposed to light, heat, and oxygen. It should come in small quantities, in dark bottles, and should be stored in the fridge. Even then, it will only be good for about 6 weeks. This is the reason it has been removed from our diet by a food industry that values shelf life over health.
- In addition to flax oil, use virgin or extra virgin olive oil for salads, vegetables, dipping and otherwise when you need oils (a 50/50 mix of these oils is healthy and tasty). Virgin/extra virgin olive oil is the only unrefined oil commercially available. Corn, canola, sunflower, safflower and other oils are processed oils. The processors typically use petrochemical based solvents to help get the oil out, leaving toxic residues in the oils. Also, all of the impurities are removed. Unfortunately for us, these

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¹ The Omnivore's Dilemma, p. 177

impurities are the materials that are good in the oils, the vitamin E and A that stabilize the oil and the phytonutrients that help us digest and use the oil. Note: don't cook food at high temperatures with olive oil (it is more stable than flax oil, but still unstable), use butter or another saturated fat instead – olive oil, and other unsaturated oils (liquid at room temperature), turns rancid and toxic quickly under high heat. If you want to wok with olive oil, add some water first. The boiling water keeps the oil temperature down to 212 degrees, which is below when olive oil goes rancid.

- Learn about, and eat corn, as it is supposed to be eaten. First, corn is not a vegetable it is a high energy, whole grain, when served whole. Having a meal of steak, potatoes, and corn, means you ate no vegetables and two starches. Second, eat corn whole. As a whole food, corn is an excellent source of carbohydrates. When broken down into its component parts, like the high fructose corn syrup in sodas, corn is toxic to you. Most packaged foods contain large quantities of fractionated corn, whether in baking soda, or partially hydrogenated corn oil, or corn starch, or xanthum gum, or dozens of other forms.
- Eat sprouts. Bean, broccoli, and other sprouts are spectacularly good for you. They often contain as many beneficial phytonutrients as the full grown foods, but at much higher densities.
 - Some particularly good foods to eat, per SuperFoods RX:
 - Spinach (and dark leafy vegetables like Romaine lettuce)
 - Salmon (and other oily fishes like trout)
 - Blueberries (and other small, dark, colorful berries)
 - Broccoli (and cruciferous vegetables like cabbage)
 - Turkey (and other lean birds)
 - Oats
 - Yogurt (with live active cultures)
 - Tomatoes (eat them both raw and cooked)
 - Oranges (and other citrus fruits)
 - Soy
 - Tea (green is the best; black tea is fine)
 - Walnuts (and almonds, cashews, pecans, sunflower seeds etc...)
 - Pumpkin

Foods to Avoid

- Avoid white bread, white pasta, white rice, and any other highly refined carbohydrates. If you do eat them, combine them in the same meal with other foods that contain fiber, fat, and protein. The naked sugars from simple sugars and starches (sugar stacked together) are a huge component of obesity and Type 2 diabetes. Naked sugars are digested extremely quickly, leading to dramatic spikes in blood sugar levels, which cause the pancreas to dump large amounts in insulin into the bloodstream to protect against sugar toxicity. This sequence, repeated tens of thousands of times, leads to pancreatic exhaustion type 2 diabetes.
- Avoid sugar. Sugar is even worse for us than refined carbohydrates. And, our bodies did not evolve in an environment when sugar was plentiful. Our bodies love sugar, an extremely energy dense substance, precisely because it was so scarce in

our food deprived history; thus its toxicity did not result in an evolutionary adaptation. We did not evolve to learn how to <u>not</u> eat sugar, when it is readily available. Think of a child's first bite of birthday cake and the intensity of their lust for that cake after their first taste. This poor control continues with us as we age, and is used against us by the food industry who wants to move as much food as is possible – they load everything with sugar, whether ketchup, or cereal, or salad dressing. Avoid donuts, candies, cakes, flavored coffees, muffins, and other sources of naked sugar whenever possible. When you break down and snack occasionally (and don't feel guilty for doing so once in a while or you will give up on this), have a cupcake, not a cake.

- Avoid, or minimize consumption of, drinks containing high fructose corn syrup or sugar, including sodas, fruit drinks, sports drinks, and energy drinks. Any drink that comes from a vending machine that is not water is bad for you. 30 years ago, the average size of a coke was 8 ounces. Now, it is 20 ounces or larger. This is a ploy by the beverage industry to sell more soda, at your expense. Go back to 8 ounce servings, when you just need such a beverage. And, add ice at the soda fountain, lots of it. Water ice displaces volume of soft drink. Also, fruit drink is not fruit. Fruit drink was developed by the beverage industry when the government told them they had to develop healthier beverages to be sold in schools. So, they created fruit drink with 10% real fruit juice and lots of high fructose corn syrup (sugar substitute), and then spent hundreds of millions of dollars in advertising trying to convince us they created new healthy choices because they are looking out for our health.
- Minimize alcohol consumption. A drink or two a day is probably fine. But, alcohol is just another form of refined sugar, and that is how it does its damage, including cirrhosis. If you are going to drink, red wine is probably your best choice. It contains most of the benefits of small, colorful berries: red grapes the skins are left in the liquid while it is fermenting, and the skins have the good stuff.
- Avoid saturated fats. These are primarily obtained from modern, corn fed, animal products, meat, dairy, eggs etc... They are responsible for much of the cardiovascular disease that plagues us. They cause clumping of platelets and clotting. They are solid at room temperature: butter, lard etc... Your blood is only twenty degrees warmer than room temperature. Think of little chunks of butter floating in your blood; not a good image but basically reality. Olive oil, liquid at room temperature, is much better for your cardio (heart) vascular (veins and arteries) system.
- Avoid foods that are cooked in (usually deep fat fried) or include partially hydrogenated vegetable oils. These substances necessarily contain trans fats², which are toxic to humans (particularly those who are sedentary don't burn the trans fats off and who don't get enough omega 3 fatty acids pretty much everyone). Foods to avoid or minimize include potato and corn chips, french fries, most deep fat fried foods, and margarines and shortenings. Non daily creamers and hard fats (except a bit of butter) are not recommended for sedentary people.³

² Trans fats are fats in shapes not found in nature. They are created when hydrogenation (running hydrogen through fats under heat and pressure) is only partial. Fully hydrogenated fats are largely inert, but also not fun to eat. Trans fats function like saturated fats in some ways, clumping together in a sticky fashion, causing platelets to clump into clots. In other ways, trans fats mimic block the action of essential fatty acids because their abnormal shape allows them to fit into a portion of the place essential fatty acids are supposed to go, but only partly.

³ Fats that Heal, Fats that Kill, p. 319

- Avoid sausages and other processed meats, which contain cancer causing preservatives like nitrites, fillers like refined starch, and saturated fats.⁴
- Avoid or minimize foods that contain aspartame (nutrasweet) or monosodium glutamate. These chemicals encourage electrical imbalance in your nervous system. They are not flavor enhancers; they are sensation enhancers. They work by increasing neural excitation, just one more feature of modern society that upregulates neural excitation. Some people respond with migraine headaches, but we are also vulnerable.
- Avoid or minimize coffee. Coffee is a strong pro-oxidant, greatly increasing oxidation within your cells. This simply causes you to age faster.⁵

A Cautionary Note

Don't treat these recommendations like a diet. People fail on tasks that they perceive as painful. It increases stress, and the stress rebounds into more food consumption and worse health. The items in bold above should be relatively easy to implement. The rest will take time. Go gradually in changing your food habits. Don't push yourself far outside your comfort zones at least initially. Pay most attention to the meals you eat during the week, when you are on a regular schedule. These are the most important meals. If you vary a little on the weekend, it is no big deal. If you need some chocolate to be happy, eat some chocolate, but keep the portion size down. If you want desert, eat desert after a meal. But keep it small, and don't eat it after every meal. Also, make sure the meal included adequate fiber and protein to slow down digestion.

Other Dietary Advice

- <u>Meal Frequency</u>: Eat upon waking. Eat something every four hours. Eat often. Graze, don't gorge. Don't eat for a few hours before bedtime. Adjust the amount of food you eat in order that you are beginning to get hungry at these times.
- <u>Develop Habits</u>: Try to eat at the same rough times each day. This alleviates stress on your system, as your body receives regular dosages on nutrients and energy. This helps avoid spike in blood sugar and insulin. This helps you avoid skipping meals, which is bad for you.
- Meal Size: **Don't eat huge meals.** That overstrains your digestive system and sets you up for digestive problems like acid reflux. It also guarantees that a large portion of your calories will be converted to fat because there is a limited amount of calories that can be burned after a meal. When you prepare a meal at home, limit the amount of food on your plate. Americans tend to eat until their plate is empty, regardless of how much food was there to start. At a restaurant, don't eat your whole meal. Meal sizes have gradually increased over the last 40 years to hugely unhealthy levels. Take half your meal home with you. Never supersize. Food industry corporations are always trying to get you to eat more, because that is how they grow their profits. They will keep inventing supersizing options despite their protestations that portion sizes are not growing, fourth meals, super big gulps, 30% more for the same price, and other

⁴ Fats that Heal, Fats that Kill, p. 319

⁵ Adrenal Fatigue, p. 171

packaging techniques to get you to eat more of their products. Supersizing was an invention that overcame societal concerns of gluttony. Researchers found that their customers would not buy a second cheeseburger no matter what they did. But, if they created a Big Mac, their customers would overcome the social norms that discouraged appearing gluttonous and eat the oversized sandwich, which is exactly their goal.

- <u>Keep your Home Free</u>: People eat the foods that are around them at home, whether they are good for them or not. If you have bad food around, you will eat it. You will reach for those foods when stressed, at night, when rushed, and in many other circumstances. If the bad foods are not around, you will find something healthier to eat.
- <u>Pay Attention</u>: We are all constantly being manipulated by corporate marketers to eat those things that are most profitable for them, which are usually really bad for us. Our choices are at least partly driven by hundreds of media messages we are exposed to every day. Realize you are being manipulated. Resist this intrusion into your dietary health. Think about what you eat and why you eat, which is to be healthy, not a profit center.
- <u>Slow Down</u>: Take smaller bites. This will slow down how quickly you eat. The slower you eat, the more chance you have to start feeling full when still eating and keep from overeating. Also, each time you take a bite of food, try to chew 30 times before swallowing. This slows you down but has other benefits. When you chew thoroughly, your food is predigested in the mouth by the enzyme ptyalin, found in your saliva. As a result, the stomach doesn't have to work as hard, and absorption of important vitamins and nutrients occurs more readily. Also, food that is not chewed enough can cause acid reflux and other digestive problems.
- <u>Have a Nice Meal</u>: Eat outside on a nice evening. Eat with friends. Have regular family meals. Don't eat in your car, or in front of the television. When we are relaxed, our nervous systems divert blood to our digestive systems, causing them to work better. When we are stressed out, i.e. scarfing an egg mcmuffin while sitting in traffic, blood from is diverted away from our digestive systems, reducing function.
- <u>Eat Breakfast</u>: **Never skip breakfast**. Doing so can cause your metabolic rate to drop 5 percent.⁶ Include proteins whenever possible in your breakfast. Eating pulp free juice, a piece of fruit, and white toast with jelly starts the day off with the blood sugar swings of naked energy consumption. It sets you in a pattern to want a donut at mid morning and to crave sugars for the rest of the day.
- <u>Drink Plenty of Water</u>: If you are dehydrated by 3 percent, this slows your metabolism.
- <u>Use Herbs and Spices</u>: Many herbs provide wonderful health benefits and flavors that help our food taste good without needing to add copious salt and sugar. Use garlic, ginger, basil, cilantro and many other herbs and spices liberally. You will get a wide variety of antioxidants and phytonutrients that you need.
- <u>Cooking Temperature</u>: Don't deep fry. There is nothing healthy about it. When frying in a pan at home, cook at lower temperatures for a longer period of time and avoid burning your foods. Browned foods are partially destroyed foods. Toxic residues result.⁷ If you are going to fry, cook with butter (the fats are saturated, more stable, and

⁶ The Cortisol Connection, p. 146

⁷ Proteins turn into carcinogenic acrolein. Starches and sugars are browned (caramelized) through molecular destruction. Fats and oils are turned to smoke by destruction of fatty acids and glycerol.

not easily destroyed even under high heat). Try to do more steaming, boiling and baking than frying.

- <u>Don't Diet</u>: If you want to lose weight, don't diet. Instead, follow the advice herein. Researchers have shown that cognitive dietary restraint, or a perceived ongoing effort to limit dietary intake to manage body weight, is a potent trigger for increasing cortisol (stress hormone) and reducing bone mass.⁸ Stress induced by diets causes rebound behavior that causes increased weight.
- <u>Food Allergies</u>: One author, who I generally think is good, recommends that everyone should be checked for food allergies. Food allergies can interfere with your ability to function daily and become a profound stress on your adrenal gland, which are a crucial organ in our stress response system.⁹

Supplementation

I used to think that taking supplements was unnecessary; after all, we evolved in a world in which supplements were not available. After much research, I realized that the diet our culture makes available to us is massively deficient in substances that are healthy for us. Even the most conscientious eater has trouble getting the nutrients he needs in our modern world. Any time a meal is consumed outside of the home, the meal is likely to be highly deficient. In fact, over half of the calories in normal American diets comes from foods from which much of the mineral, vitamin, essential fatty acids, and fiber content has been removed – 17% from sugar, 20% from refined cereals, 3% from alcohol, 18% of more from refined fats. One author has had some similar thoughts:

Since most of our foods are not garden fresh, sun ripened, organic, in season, and locally grown, and since we live in an environment polluted with lead, cadmium, smoke, carbon monoxide, plastics, pesticides, and other toxins, we will likely benefit if we enrich the best balanced fresh, whole foods we can get with fresh juices, super foods, food concentrates, or high quality vitamin and mineral supplements.¹¹

Another component of this, I theorize, is that in hunter gatherer diet times, the ratio of nutrients / fiber to energy was much higher. We had to eat more food than we eat today for the same amount of energy, but a large chunk of that food was undigestable fiber and nutrients. This was because we had not yet bred our vegetables to increase the size of the energy portions. Apples and tomatoes, and many other vegetables, were very small, lots of skin to fruit. Today, all we have available to us are vegetables and fruits with very low ratios of nutrients / fiber to energy. Thus, we don't have to eat as much food to get the required amount of energy producing carbs, fats and proteins. And, this means we don't get nearly enough of the other stuff, which means we need to supplement.

¹⁰ Fats that Heal, Fats that Kill, p. 77

⁸ The Cortisol Connection, p. 147

⁹ Adrenal Fatigue, p. 177

¹¹ Fats that Heal, Fats that Kill, p. 319

- **Everyone should take a multivitamin every day**. Good supplement preparations provide 200 micrograms per day each of chromium and selenium. They should contain more than the RDA of vitamins, but usually contain less than optimal vitamin C and E, so additional amounts of these might be wise. As optimal amount of vitamin C is usually between 2 and 10 grams, and for vitamin E is between 400 and 800 IU for most people.¹²
- **Everyone should take omega 3 fatty acid supplements (2 or 3 capsules) each day.** Omega 3 fatty acids have been methodically stripped from our diets, to our great detriment. Corn replaced grass in the animals we ate one source gone. Unstable oils like flax and hemp (very high in omega 3 oils) were eliminated by industry which is more interested in shelf life. Other sources disappeared. The result: we get almost no omega 3s. This is exceedingly bad. The situation leads to chronic inflammation, poorly performing cell membranes, neuronal deterioration, and many other problems.
- Other vitamins and minerals that could, and probably should be supplemented, are calcium and magnesium (bulky substances that are only in small amounts in multivitamins), zinc (which is particularly important and available in modern diets in only limited amounts), and B complex vitamins. Zinc supplements should be balanced with copper, 15 parts zinc to 2 copper.

Advice to picky eaters

I am a picky eater. I have been all of my life. This creates challenges in constructing a healthy diet. Some picky eaters are that way because of how their sensory systems process information. Some are what is called tactile defensive, which means their mouth responds negatively to textures that most people don't find offensive. Other people, about 25% of the population, are 'supertasters', meaning they respond to flavor more strongly than most people. Bitterness in particular is challenging for supertasters. This is particularly problematic as most vegetables are bitter (a defense the plants used to not be eaten; fruits are often sweet, because they wanted to be eaten to spread their seeds). Other people are temperature averse, responding negatively to foods or liquids that are warm or cold. Still others have an overly strong gag reflex, causing them not to want to eat foods or portions that trigger this reflex. And, some people have all of these challenges (me) and others. Fortunately, there are strategies that can help.b

First, learn about food. I have found that the more I know about the health benefits of a particular food, the less aversive the food is to me (except broccoli). With knowledge, my thinking brain (prefrontal cortex) can control the negative reaction of my emotional brain (limbic system). Second, identify what it is about a food that you don't like and create a strategy to address that issue. For instance, I don't really like the flavor or texture of green beans, or most vegetables, but if I eat them in the same bite as a piece of meat, the flavor and texture of the meat disguises what I don't like about the vegetable. Or, I can eat a dish in which the meat and vegetable are integrated, like meat loaf (with grass fed beef). Also, if vegetables are served in a dish with a strong sauce, like a Thai stir fry, the sauce provides the buffer which makes them okay. Third, put yourself in

¹² Fats that Heal, Fats that Kill, p. 319

situations where are likely to try different foods. I am change averse, and avoid eating new foods simply because of this aversion. Most of my advances in eating have occurred in public. I tend to try more foods when I have pressures from a social setting that overcome my normal change resistance. They also often come when traveling, when I am already feeling adventurous.

Exercise

Besides maintaining a reasonable diet, exercise is the most important activity one can engage in for long term health and the reduction of chronic illness and disease. Exercise (or simple movement built into a day) was a crucial part of the human environment during human evolution. When we evolved, we walked on our feet, hunted game or gathered berries, brought water from the stream, built our homes by hand, and herded our flocks. All of this involved moving. The biological balances that control human health were all set during a period when humans moved all of the time. For humans to be healthy, we need to move, a lot. And, this requirement goes up when we are under stress, which is almost constantly these days. Horses that are stressed need to run. It is how their body copes with stress. Horses that are penned during stress frequently simply die. With humans, the relationship is not as quick, but it is the same.

Exercise has a tremendous number of benefits:

- <u>Stress</u>: Exercise makes the body more resilient in the face of stress. People who exercise regularly are less likely to get sick after stressful situations. Doctors know exposure to mental or physical stress can increase susceptibility to and severity of disease. In one study, rats that began running on a wheel for four weeks prior to exposure to stress were protected against the suppressive effect of stress exposure on immune response. But rats that either began running on the day of stress or that remained sedentary suffered the negative effects of stress exposure.¹³
- <u>Weight Control</u>: Exercise helps keeps the body from becoming fat, and fat in excess is very detrimental to the human body, particularly because the adipose tissue highly present in abdominal fat causes a constant, low grade inflammatory response to exist. I find weight lifting is particularly effective for fat reduction. Greater muscle mass (which initially causes weight gain) increases your metabolism, which causes you to burn more energy, which will ultimately lead to weight loss, fat loss, and better health.
- Type II Diabetes Risk: Exercise helps prevent and manage type 2 diabetes. Exercise helps insulin work better, lowering blood sugar. A recent study involved numerous people at risk for Type II diabetes due to their weight. Participants were put on an intensive lifestyle intervention that involved following a low fat diet and walking half an hour five times per week. The results were nothing short of astonishing. Participants in the study reduced their risk of diabetes by 58 percent, whereas participants in another group who took the medication metformin reduced their risk by 31 percent.
- <u>Inflammation</u>: Regular, moderate exercise reduces inflammation throughout your body, including in your brain, and reduces the incidence of tiny strokes that can impair your ability to think clearly.

¹³ http://www.sciencedaily.com/releases/1998/11/981112075727.htm

- <u>Cardiovascular Health</u>: Exercise improves cardiovascular tone and function. Exercise helps lower blood pressure: A reduction of 5 to 10 millimeters of mercury (mm Hg) is possible. Exercise also improves cholesterol levels. Exercise often increases the concentration of high-density lipoprotein (HDL or "good" cholesterol in the blood), especially when accompanied by weight loss. Exercise also helps reduce triglyceride (stored fat) levels.
- <u>Mental Health</u>: Exercise improves mental clarity and cognition. Exercise also helps boost your sense of well-being. Exercise has also been shown to improve mild-to-moderate depression and anxiety, improve sleep and boost moods. Levels of beneficial neurotransmitters such as dopamine, serotonin and norepinephrine are higher in those who exercise the same ones elevated by many antidepressants.
- <u>Brain Size</u>: A study published last year by researchers at the University of Illinois reported that just walking for three hours per week for only three months caused so many new neurons to grow that it actually increased the size of people's brains.
- <u>Intelligence</u>: Exercise makes you more intelligent. Older adults who exercise regularly have better memory, are better at going from one mental task to another, and can focus and concentrate better than those who are sedentary. Exercise makes younger people smarter too. Kids who exercise have fewer problems with attention-deficit disorder and learn faster. Studies have shown that physical education in schools improves academic performance as well as physical fitness.¹⁴
- <u>Prevent Osteoporosis</u>: Exercise may increase bone density and protect against bone mass decline, especially if weight-bearing activities are involved.
- <u>Prevent Cancer</u>: Exercise has been shown to strengthen the immune system, improve circulation, reduce body fat and speed digestion. Each has a role in preventing cancer, particularly cancers of the colon, prostate, uterine lining and breast.
- <u>Energy and Stamina</u>: Exercise improves energy and stamina. A lack of energy often results from inactivity, not age. ¹⁵

Exercise is a challenge for many people. Ten thousand years ago, people didn't need to put on their gym shorts and head to the YMCA. They got their exercise through their lifestyle. Today we don't because of cars, elevators, golf carts, automatic can openers and landscapers. In fact, movement is viewed in many corners of our country as low class. People do everything they can to avoid it. We have replaced movement with clever gadgets that we can buy. And, we are suffering horribly as a result. Everyone needs exercise. The negative consequences won't show up tomorrow, but they will show up, and they will be bad. We modern Americans don't seem capable of intellectually tying chronic disease to a failure to exercise for the last decade as a way of motivating ourselves to change, but the connection is blaring.

So, get out there and exercise. Walking three or four times a week for 30 minutes is a minimum. Find types of exercise you enjoy. Try getting on a bike and riding with a friend. Walk instead of riding when playing golf – that will also make it harder to drink beer. Take the stairs instead of the elevator. Lift weights with a personal trainer (weight lifting is hugely beneficial as it speeds up your metabolism and allows for fast weight

¹⁴ http://www.msnbc.msn.com/id/20746682/site/newsweek/page/3/

¹⁵ http://www.sciencedaily.com/releases/2008/01/080104123421.htm

loss). Go hiking on weekends. Tinker in your garden. I know the allure of the TV is strong. But, the TV is toxic. Turn it off and go outside. You will enjoy yourself once you get there.

Relaxation

In its natural state, the human body is usually very relaxed. Muscles are loose. The heart beat is relatively slow. The mind is clear. Digestion occurs easily. The regular presence of a relaxed state is crucial to normal human functioning. Unfortunately, this relaxed state is present more and more infrequently among us westernized, supposedly sophisticated, humans. This is for many reasons.

Our lives are more full with responsibilities and activities. We work long hours. When we aren't working, we spend a lot of our time in cars, a place that is extremely not relaxing. When we get home, we have many non-relaxing options to choose from that were not present in human homes 100 years ago. We can, and usually do, watch lots of television, which is filled with violence, emotional conflict, embarrassment, and many non-relaxing emotions that we respond to like they were happening to us thanks to our mirror neurons. We play video games. We surf the web, looking for sources of stimulation. Rarely do we read, or sit quietly, or actively relax through meditation.

Real relaxation is pretty scarce these days, and we are much worse off as a result. Our bodies stay constantly under stress. Recovery periods are reduced in number and duration. And, our bodies stay constantly flooded with toxic stress hormones that were never designed to be constantly present. Humans, 10,000 years ago, dealt with infrequent, but potentially deadly, stressors – acute stressors. And their bodies evolved to cope with this pattern. Today, our stressors are much less immediately serious, but chronic. And, our bodies are not adapted to live this way in a healthy fashion. Diseases of stress (failure of relaxation) are rampant, from autoimmune diseases like MS and rheumatoid arthritis, to cardiovascular disease, to cancer.

To counter this, we need to use many techniques that are, fortunately, readily available.

Space

People need to build space into their lives. Rather than live in a manner in which you go from activity to activity, place to place, with a feeling of no control (an increasingly common lifestyle), design your day so that you have some time to sit and relax. Take a walk. Sit quietly. Read a fantasy book. We need a little time to ourselves each day in which demands are not pulling on us. We need to relearn how to feel okay just being a little bored, to restrain our (externally created) feelings that we must keep busy if we are to conform to modern ideas of success. And, collapsing exhaustedly onto the sofa at 10 PM to go brain dead and watch Letterman is not enough.

Vacation

Vacations are a very important type of space. They allow the body to live under a lower level of stress for an extended period of time. They allow us to experience what it is like to not be stressed all the time. This helps lift the veil on what our daily lives are like, which gives us an opportunity to contemplate change. You remember that feeling when leaving a tropical vacation of wanting to stay, maybe even wanting to move there. That is a feeling of not feeling stressed, knowing that it feels good, and wanting to postpone the return to a life of stress.

Active Relaxation

There are many techniques that societies (which had much less stress than ours) over the last few millennia have invented to help people relax. Adopt one or two for yourself. Indulge in a weekly massage. Take up yoga. Try meditation. Learn about progressive relaxation techniques. Try learning a martial art. Learn some breathing techniques like belly breathing that help induce the relaxation response.

Happiness

People today have lost touch with activities that really make them happy. They have substituted into their lives activities that they think, have been convinced, are supposed to make them happy – but they really don't. Having an oversized house with a large yard may make someone look really affluent, but affluence doesn't buy happiness, and such a home soaks up a lot of time in maintenance. Living in far flung suburbs may insulate you from the problems of urban poverty, but the time spent driving around prevents you from spending your time doing things that make you happy. And, spending your evening driving your kids from activity to activity may seem like a good idea in creating well rounded kids, but it creates overwrought parents, as well as overwrought kids, with no time for themselves.

Happiness is crucial for human thriving. We need time to do things that calm us to counteract all of the societal influences that are trying to profit through our stimulation. Calmness increases the resiliency of humans to the stresses in our world. Developing hobbies that buffer you from the modern world is a good thing. Painting and sculpture, gardening and landscaping, hiking, bird watching, and many other hobbies have been used for generations to add happiness to human lives. Beauty is something we should strive to be immersed in whenever possible. Beautiful scenes, noises, scents and tastes (that are natural and not chemically created) all work to calm the human nervous system. Enjoy a sunset frequently. Spend time in the woods or walking by a stream or river. Wander around the art museum. Get a fountain for your backyard and enjoy the sounds of running water.

Sleep

Sleep is not a luxury. It is a necessity. While you may be able to get by with 6 hours a night, this is not a cause for celebration. It is a problem for your body. It results in

a system that is much less resilient in the face of the stresses we all deal with. Chemicals involved in the stress pathways are significantly elevated in those who get inadequate amounts of stress. Glucose metabolism is also affected, promoting Type II diabetes. All of this increases the chances of the development of chronic disease. It reduces quality of life, mental processing, and emotional control.

If you snore, this is likely negatively impacting your sleep. Try to identify the reason you likely snore. If you are overweight, which is often the cause of snoring, lose some weight. If you snore when you sleep on your back, try to sleep in a different position. Try a commercially available product, like Breath Right strips, or Breath Right spray. See if they work for you; your spouse will be happy to help. If you snore and your sleep is not restful, get tested to see if you have sleep apnea, which is a condition in which you are deprived of oxygen until you startle yourself awake. This constant waking makes restful sleep almost impossible.

Managing Sensory Inputs

We live in a world that is very different from a sensory standpoint than the one we evolved in. Our natural world is one that is quiet, beautiful, and soothing. Noises were natural and fluid. Light changes occurred gradually. Touch from fellow humans was frequent. Vibration was non-existent. Modern society has changed all that.

Now, we sit in vibrating cars for hours at a time. We sit under vibrating, fluorescent lights that offer highly deficient illumination. We spend large chunks of our day sitting in front of TV and computer screens that overstimulate our brains. We spend more and more time alone, often not touching another person all day. We spend our days indoors, with various modern conveniences beeping and humming at us, whether cell phones, or vacuum cleaners, or door bells.

This is not the place we grew up as a species. It is toxic to us. We need to actively seek contact with the world we are designed to live in. Most importantly, go outside. Get natural light. Feel the wind. Smell the flowers. Notice the quiet. Hang out in parks. Hike in the woods. Spend some time gardening. Take walks with your partner. This is really important. When you are inside, let in natural light. Use some incandescent bulbs in addition to compact fluorescents; their light is much more complete. Limit your exposure to TV, video games, and computers. Get a fountain and enjoy the sound of running water. If you live next to a busy road, move. The constant drone of cars is not a sound we are adapted to deal with effectively. If you have a long commute, move closer to work, or get a job closer to home.

Managing Intestinal Flora

An imbalance in the microorganisms of the intestines is another common body burden. The healthy intestines normally contain over 400 different kinds of microorganisms, all living in a delicate balance within their own ecosystem. This balance can be disturbed and produce symptoms ranging from vague and mild intestinal upsets to

debilitating fatigue and intolerance to food and/or environmental substances. The use of antibiotics and other antimicrobial medications is frequently the immediate trigger for such imbalances. The antibiotics kill not only the disease causing bacteria, but also the good bacteria in your intestinal tract that are a necessary part of intestinal health. When the good bacteria are killed, harmful bacteria, fungi, yeast, and other ill doers have the opportunity to move in and take over. It is the abundance of these detrimental microorganisms growing out of their proportion that creates the problem. A lack of vegetables, fruit, and fiber with an over abundance of fats, sugary products, and refined foods in the diet of industrialized nations have predisposed us to intestinal flora problems – yeast, for instance, eat sugar. One way to manage the situation is to eat more good bacteria. They can be found in yogurts with 'live active cultures' or in a probiotic food supplement.

¹⁶ Adrenal Fatigue, p. 231