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• The *Future* of Natural Healthcare •

• *14 Life Altering Tips* •

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The United States spends more than \$3 trillion each year on health care. That's more than what the next 10 countries spend combined! There could be justification for spending that exorbitant amount of money if it produced results, but what does research show?

According to the Journal of the American Medical Association, out of 13 industrialized nations, the United States is last when it comes to the most years of life lost for adults and the highest infant mortality rate. The World Health Organization and the National Research Council claim that out of 16 industrialized nations, the United States has the highest chance that a child will die before age 5, the highest rate of women dying due to complications of pregnancy and childbirth and the second-highest rate of death by coronary heart disease and lung disease.

Mainstream medicine and its care for the millions of Americans struggling with chronic diseases leaves many with little hope or answers. The standard model of care for conditions such as heart disease, diabetes, low thyroid, acid reflux, and autoimmune disease is inadequate, to say the least. Having coached people all over the world in reversing conditions such as these, I've been able to pinpoint three reasons why mainstream medicine is failing you:

1. A LACK OF INDIVIDUALIZED CARE.

Mainstream medicine has become a colossal "one size fits all" system. The focus has been to diagnose a disease and match it with a corresponding drug. This medicine matching game doesn't take into account that we're all different; every person is genetically and biochemically unique. There are no "magic pills." What works for one person may not work for the next. We should take into account biological variability and tailor a solution for the individual.

2. A POLICY OF TREATING SYMPTOMS.

Pharmaceutical drugs are, for the most part, not designed to heal, but to manage symptoms. Because this is the case, when a patient with a chronic condition is given a medication, he's often told he'll have to take the drug indefinitely. This is also why, as time goes on, medication lists normally get longer and dosages become higher.

We should see symptoms as the body's "check engine light." What would you think if I covered up the check engine light and kept on driving as usual? In terms of health, we should find out why the symptoms are there in the first place. Very few people are sick from a pharmaceutical deficiency. Clinical investigation of the underlying issues is the only way this can be accomplished.

3. AN OVERLOAD OF SIDE EFFECTS.

A good question to ask yourself when deciding between healthcare options is, "What is the most effective option that causes the least amount of side effects?" If a drug fits this criterion, then it might be the best option for you. It just so happens that medications often do not fit this criterion.

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Have you ever watched a drug television advertisement before? Prescription drugs killed more people in 2009 than heroin and cocaine combined, according to the U.S. Centers for Disease Control and Prevention. According to the Journal of American Medical Association, more than 100,000 people die each year from the proper use of prescription drugs. Not from overdosing or taking the wrong drug, but from the side effects of the “right drug.”

According to the World Health Organization, the global pharmaceuticals market is worth \$300 billion every year, a figure that is expected to rise to \$400 billion within three years. The WHO agrees that the current pharmaceutical system has “an inherent conflict of interest between the legitimate business goals of manufacturers and the social, medical and economic needs of providers and the public to select and use drugs in the most rational way.”

Because of this conflict of interest, when it comes to chronic and autoimmune disease, mainstream medicine is trained to diagnose a disease and match it with a corresponding medication. This medicinal matching game leaves many frustrated when nothing changes with their health but a growing prescription list.

When it comes to the majority of chronic diseases, like heart disease and diabetes, or autoimmune conditions like Hashimoto’s, there’s so much you can do naturally to support optimal health. As a functional medicine practitioner my days are spent speaking with sick people on medications that make them feel sicker. It amazes me how many people don’t know the side effects of the drugs they take on a daily basis. Moreover, the overwhelming majority of these people are able to reverse their diseases, and their prescribing doctors are able to reduce and eliminate their medications.

“This medicinal matching game leaves many frustrated when nothing changes with their health but a growing prescription list.”

SO WHAT NOW?

I’m not advocating for anyone to wantonly go off their medications on their own. I’m encouraging you to investigate the side effects of the medications you’re taking. I’m encouraging you to have an open discussion with your doctor, beyond the talking points from the pharmaceutical reps. I am also encouraging you to ask the question, “Why do I have this problem in the first place?” Hopefully these steps will spark people to take responsibility for their lives, make informed decisions and take action on what they can do today to start regaining their health. So where does this leave us?

We need to do something dramatically different to fix a dramatically failing model of care. Admittedly, it would be a daunting task to change the trajectory of the entire system, but you can change your trajectory. Alternative care such as functional medicine attempts to be a solution to the standard model of care. In functional medicine, we design health programs for the individual by clinically investigating the underlying dysfunctions. It is truly hope for the millions falling through the cracks of conventional care.

FUNCTIONAL MEDICINE

The term “Functional Medicine” can seem rather ambiguous. Although this field is becoming more mainstream due to voices like Dr. Oz, Dr. Frank Lipman, and Dr. Mark Hyman lauding it as the future of health care, functional medicine is still generally unknown to the public. The term and field of functional medicine refers to something completely different than what we have now come to know as conventional care.

Traditionally a medical doctor uses drugs or hormones as therapeutic tools to deal with dysfunction or disease. For various conditions including low thyroid, diabetes, high blood pressure, elevated cholesterol and so on, the standard model of care is generally all the same. Your general practitioner could decide to treat you, or could elect to refer you to a specialist. A GP and specialist have access to the same basic tool: medication. The training in the standard model of care is to diagnose a disease and match that disease with a corresponding drug. The standard model of care works well for acute diseases, trauma, infection, and emergencies. Sadly, it fails miserably in the care of the chronic diseases that affect over 125 million Americans.

Chronic conditions - such as allergic, digestive, hormonal, metabolic, and neurological problems – which most Americans suffer from on a daily basis, are finding solutions in the field of functional medicine.

So, what exactly is functional medicine and how can it assist the millions of Americans dealing with chronic disease?

HERE ARE 5 BASIC PRINCIPLES THAT DEFINE FUNCTIONAL MEDICINE:

1. Functional Medicine views us all as being different; genetically and biochemically unique. This personalized health care treats the individual, not the disease. It supports the normal healing mechanisms of the body, naturally, rather than attacking disease directly.
2. Functional Medicine is deeply science based. The latest research shows us that what happens within us is connected in a complicated network or web of relationships. Understanding those relationships allows us to see deep into the functioning of the body.
3. Your body is intelligent and has the capacity for self-regulation, which expresses itself through a dynamic balance of all your body systems.
4. Your body has the ability to heal and prevent nearly all the diseases of aging.
5. Health is not just the absence of disease, but a state of immense vitality.

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Here lies the clear distinction and definition of functional medicine. Instead of asking, “What drug matches up with this disease?” functional medicine asks the vital questions that very few conventional doctors ask: “Why do you have this problem in the first place?” and “Why has function been lost?” and “What can we do to restore function?”

In other words, Functional Medicine looks to find the root cause or mechanism involved with any loss of function, which ultimately reveals why a set of symptoms is there in the first place, or why the patient has a particular disease label.

HERE ARE 14 TIPS TO ACT AS A STARTING POINT TO RECLAIM YOUR HEALTH AND LIFE...

1. SEEK PERSONALIZED DIAGNOSTICS 

For anyone that wants to find out why they’re going through unanswered health questions, we have to go beyond the surface and look at the underlying components of weight loss resistance. Functional medicine is based on cutting-edge research and diagnostic testing that gives insight into issues like weight loss resistance. I investigate these factors for people all around the world and help them overcome these seemingly insurmountable problems.

LOW HDL + HIGH TRIGLYCERIDES

These are basic bio-markers that are stronger predictors of heart attack and stroke:
Optimal Range: HDL: 60-70, Triglycerides: <100

TELOMERE LENGTH

Telomeres are the ends of your chromosomes that are responsible for healthy cell function. As time passes, telomeres become shorter, which leads to aging and chronic disease. A lot of regenerative medicine research is focused on the regeneration of telomere length. By clinically looking at your telomere lengths you can gain insight into how rapidly or slowly your body is aging.

C-REACTIVE PROTEIN

This inflammatory protein is essential for cleaning up bad bacteria but in excess can lead to accelerated aging, chronic disease, and damaging of telomeres.
Optimal Range: < 0.5 mg/L

SMALL DENSE LDL PARTICLES

LDL is typically called “bad cholesterol” but this is a simplistic and inaccurate view of cholesterol. LDL particles, protein carriers which carry cholesterol around in your body, can be both large buoyant or small dense. Small dense LDL particles can cause damage, and it’s these particles — not the cholesterol itself — that indicate a risk for heart attack and stroke.
Optimal Range: < 200 nmol/L

HOMOCYSTEINE

This protein in excess (and with a B vitamin deficiency) has been linked to cognitive decline.
Optimal Range < 7 Umol/L

HGB A1C

This 2-3 month average A1C level in blood sugar has been linked with higher rates of all-cause mortality in patients with diabetes.

Optimal Range: < 5.3%

VITAMIN D

This nutrient is responsible for hundreds of different genetic pathways in the body. Vitamin D deficiencies are linked to chronic disease, and optimal levels are linked to an actual preservation of our telomeres, the part of your chromosomes that maintain our youth! Vitamin D should be paired with other fat-soluble vitamins, like vitamin A and K2.

Optimal Range: 50-60 ng/mL

FASTING INSULIN

When your body breaks down carbohydrates, and to a lesser extent, proteins into glucose, your pancreas secretes insulin to bring down your blood sugar. High levels of insulin in the body has been linked to accelerated aging and telomere shortening.

Optimal Range: < 3 uIU/mL

KNOW YOUR CORTISOL OUTPUT + RHYTHM

One of the labs I run on my patients is a 24-Hour Adrenal Stress Index, a salivary test which tracks your cortisol, stress hormone, levels, HPA (brain-adrenal) axis quality, and other hormone levels throughout the day to get a comprehensive view of what's going on in your particular case.

KNOW YOUR INTOLERANCE TO PROTEINS LIKE GLUTEN

I run comprehensive gluten intolerance labs for some cases to definitively know the level of their gluten intolerance, removing gluten for 60 days, then reintroducing it, can also be a helpful test for some people.

KNOW THE LEVEL OF YOUR GUT PERMEABILITY

Your gut is where the majority of your immune system resides. When your gut's protective lining is compromised, it can give rise to an autoimmune or inflammatory response throughout your body. I run labs to look at the level of my patients gut permeability so we can address this major underlying component to regaining one's health.

FIND YOUR CROSS-REACTIVE FOODS AND REMOVE THEM

Even gluten-free grains like corn and rice can flare up the immune system in some people. Molecular mimicry occurs when your body confuses something that I see very often in my practice. Find out if you are having any cross-reaction with the food you are eating. This can be very helpful for people who have cleaned up their diet but are still having symptoms.

KNOW YOUR ANTIBODY LEVELS

Autoimmune conditions are very common today, and go vastly undiagnosed. If you have an autoimmune response going on in your body, there can be elevated antibodies, proteins that are a part of your immune defense system. Knowing your specific antibody levels will help gauge your healing process from an objective lab perspective. Knowing your antibody levels associated with other relevant autoimmune disorders will give you insight to any secondary issues to deal with.

2. HEAL YOUR HORMONES

Dysregulations and resistance patterns of hormones like cortisol, insulin, and leptin can play a role in stubborn weight gain and health problems. Healing hormonal communication pathways varies so greatly and has to be looked at on an individual basis by a functional medicine practitioner or other qualified clinician.

LEPTIN RESISTANCE

Your fat cells aren't just some unsightly nuisances that jiggle and make clothes not fit; they're actually an intelligent part of your endocrine (hormonal) system. Fat cells produce a hormone called leptin. One of leptin's jobs is to tell your brain to use the body's fat stores for energy. Leptin resistance occurs when leptin is not recognized by the body, specifically the hypothalamic cells of your brain. Your body then thinks it's in starvation mode, which makes the body want to store more fat.

INSULIN RESISTANCE

Just like leptin resistance, insulin resistance is not a hormonal deficiency but a hormonal resistance pattern. Most people know insulin resistance when it comes to type II diabetes, but insulin resistance is seen in millions of people who have not progressed to the full-blown diabetic disease. This pre-diabetic metabolic syndrome is marked by this resistance to insulin. This means your body is producing insulin but your body is not using it properly. The problem here is insulin is a fat storing hormone, which makes weight loss an uphill battle for many.

ADRENAL DYSFUNCTIONS

Your adrenal glands are another key player in your endocrine system. One of the adrenal glands' many jobs is to produce cortisol, your body's stress hormone. When your body is producing excess cortisol, this can cause your body to hold on to weight. I track my patient's cortisol levels throughout the day to see if high cortisol levels or an altered cortisol rhythm is a factor in their case.

THYROID PROBLEMS

A well-functioning thyroid is essential for many different reasons; one of them is the ability to lose weight. Typically, when someone is having difficulty losing weight, he'll ask to have his thyroid checked. If the thyroid-stimulating hormone (TSH) is "normal," the person will generally be told there's nothing wrong with him and he just needs to eat less food. Looking at just TSH is a drastically incomplete view of the thyroid and weight loss resistance. I have written extensively about uncovering undiagnosed thyroid problems.

ESTROGEN/PROGESTERONE IMBALANCES

The balance between progesterone and estrogen is essential for optimal health in women. Estrogen imbalances are a factor I see in many patients struggling with weight-loss resistance. Tracking female hormone levels for a month via salivary testing can give insight into this complex factor in health and weight loss.

3. HEAL YOUR GUT + YOUR BRAIN

Once you know the level of your gut permeability and whether you have any secondary issues like small intestinal bacterial overgrowth (SIBO) or chronic bacterial, yeast or parasitic infections, you will want to start the healing process. There are many approaches to this aspect of health, but for here's some great general information on natural ways to heal the gut.

There are many connections between your gut health and your weight (like maintaining a healthy microbiome), and a healthy brain is another key component to. There are plenty of resources out there to help you take a more holistic approach to weight loss, so get reading!

Our society is experiencing an epidemic of chronic brain problems. An estimated 40 million people in the United States experience some sort of anxiety-related disorder. As many as 30 million suffer from depression.

The use of antidepressants doubled from 1995 to 2005, and they're now the most prescribed drugs on the market. There's been a twentyfold increase in attention-deficit drug consumption over the past 30 years. Autism now affects 1 in 88 children. From anxiety, attention-deficit disorder (ADD) and autism to brain fog, dementia, depression and mood swings, one thing is clear: we have a rapidly growing mental health problem.

4. MAKE DETOXIFICATION A REGULAR PRACTICE

Helping your body on a daily basis to remove toxins is a good idea. Eating a variety of green leafy vegetables like kale and spinach and avoiding sugar and processed foods will aid your body in many different ways.

5. MANAGE STRESS

It's no surprise that chronic stress is like gasoline for disease. Many of my patients even noticed the onset of their condition to have first appeared during very stressful life events. Regular practice of meditation or tai chi can help give you tools to better manage stress and balance your immune system.

6. INCREASE YOUR GLUTATHIONE LEVELS

This important nutrient is also deficient in many people with poor health. Eating plenty of sulfur-rich vegetables like onions, cabbage, and broccoli aid in methylation, a biochemical pathway which produces glutathione naturally. Glutathione is your body's most powerful antioxidant, and is one of the reasons why people don't get cancer. Low levels are linked to accelerated aging and chronic disease. Nutrients like N-acetyl cysteine and turmeric have been shown to help boost glutathione in the body and preserve telomeres.

7. BURST TRAINING

You don't have to be a gym junkie to be healthy. High intensity interval training (HIIT) or burst training for less than half an hour a few times a week has been shown to increase your body's cellular repair anti-aging mechanisms and preserve telomeres.

8. INTERMITTENT FASTING

Sounds intense, but the temporary restriction of calories has been shown to rejuvenate the aging process. Studies have shown that animals who ate about 30 percent fewer calories also lived about 30 percent longer than the animals that ate more. One study also showed a reduction of cancer risk with intermittent fasting. This may not be for everyone, but is one way to increase the release of your body's anti-aging hormones and preserve of telomere length.

9. EAT A VARIETY OF PLANT FOODS

We're alive because of biochemistry. Our bodies function because of nutrients, and vegetables are straight out of nature's medicine cabinet. Each color variety offers you a unique array of the nutrients your body craves. Studies have suggested that a wide variety of plant food provides the essential nourishment your body needs to preserve your telomeres. I speak to many people who tell me, "Well, I don't eat vegetables," or, "I only like these two vegetables," or the infamous, "I like corn" (corn is a grain, not a vegetable). They've decided ahead of time which vegetables they will and won't eat. When I have them try something they thought they hated, these people often end up actually liking it. For the ones who still don't like the taste? I tell them what I tell my two little kids: Sometimes in life we do things we don't feel like doing, because it's good for us and we're big kids now.

10. DRINK TEA

We've all read about the health benefits of tea, but one you may not have known is tea's effect on your telomeres. One study found that those who drank three cups of tea per day had significantly longer telomeres than those who drank only a small amount. Green tea has a higher percentage of valuable nutrients (polyphenols) than black tea.

11. EAT HEALTHY FATS

The low-fat diet approach to health that has been promulgated for the last 50 years has made us sicker than ever before. Good fats are essential for a healthy, long life. Research has linked healthy fat consumption with an extension of your telomeres and youth. Also remember your brain is made of 60% fat and 25% cholesterol! Fats like coconut oil, fermented cod liver oil, butter oil, grass-fed beef and avocado aid in optimal brain, cellular and hormonal function. These fats are also needed for fat soluble vitamins like A, D and K2 to be used by the body. Both these fats and fat-soluble vitamins are needed for the preservation of your telomeres.

With all this focus on fat, it's essential to understand the difference between healthy and unhealthy fats. Some fats are essential for health, while others can fuel oxidative stress or inflammation and put a serious strain on your health. There are four different types of fat – monounsaturated fats, polyunsaturated fats, trans fats, and saturated fats.

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MONOUNSATURATED FATS (MUFA)—These are fats that are liquid at room temperature but become hard and solid when put in the fridge or are cooled. Olive oil, avocado oil, and seed and nut oils fall into this category. These oils can contribute to heart health and healthy cholesterol, reduced risk of stroke, improved insulin resistance, and reduced belly fat, among other benefits. For a healthy ketogenic diet centered on healthy fats, these are a simple staple to keep in your arsenal of foods.

POLYUNSATURATED FATS (PUFAS)—Here's where many people get confused. While polyunsaturated fats found in fatty fish like sardines, salmon, and mackerel, as well as seeds and nuts such as flaxseeds and walnuts, are good for you, some other oils in this category are not great at all and can actually be very harmful to your health. The ones to avoid are canola oil, soybean oil, safflower oil, and vegetable oils. The difference here is that one is a natural polyunsaturated oil (like omega oils) and the other is a highly processed polyunsaturated fat (like vegetable and canola oils). While natural polyunsaturated oils can improve healthy cholesterol levels and calm inflammation, processed, refined ones do the exact opposite, fueling inflammation and messing up your lipids. Avoid the refined kinds whenever possible.

TRANS FATS—These are the fats your doctor, mother, and Facebook friends have all warned you about. Altering the chemical makeup of fats and adding hydrogen (thus the name partially hydrogenated oil) increases the shelf life of the fat—and the dangers, too. This is the type of fat that raises your LDL cholesterol and lowers your HDL cholesterol, which can lead to heart disease. If you pick up processed, packaged food in a grocery store and read the label, you will often see “partially hydrogenated oil.” It's found in a variety of foods including margarine and creamers, and in baked goods like cookies, cakes, and potato chips. It's cheaper and has a more stable shelf life so it's used frequently—unfortunately, at the cost of your health. Trans fat (along with polyunsaturated fats) is also used in fryers in restaurants and fast-food chains. Avoid this fat entirely. If you aren't sure what oil it is when you are eating out, ask. Pick up the labels and read. Be your own health advocate and avoid these fats that can and will hurt your health.

SATURATED FATS (SFAS)—Misunderstood and wrongly accused of being a culprit of heart disease, these are, in fact, a necessity for healthy immune function, hormone health, cellular health, and brain health. Examples of saturated fats are grass-fed butter, ghee (clarified butter), coconut oil, eggs, and meats. These fats actually can bring up healthy HDL cholesterol levels. Unlike monounsaturated oils, these are solid at room temperatures.

The studies that naysayers often cite to vilify saturated fats do not link eating more saturated fat to heart disease—rather, they link it to increasing cholesterol numbers.

The reality is, total cholesterol is a poor predictor for assessing heart attack and stroke risk. Studies have found that there might be no association between high total cholesterol and heart attack and stroke risk.

It is very interesting that the fat-averse are still suggesting that we switch from using saturated fats like coconut oil to polyunsaturated fats like corn and vegetable oil. One source that they cite is the Minnesota Coronary Experiment, which is decades old. A recent reevaluation of the data published in the British Medical Journal found that study participants who swapped saturated fats for polyunsaturated corn oil had a 22 percent increase risk of death for every 30 points their cholesterol went down! Better predictors for heart attack and stroke risks are high inflammation markers like C-reactive protein (CRP) and homocysteine, low HDL (“good” cholesterol), high triglycerides, and high small dense LDL protein carriers. The other LDL subtype is the large buoyant particles, the nonoxidized, noninflamed LDL particles, which are protective just like HDL.

Researchers have found that high-fat diets containing healthy, real-food saturated fats like coconut raised HDL, lowering triglycerides and small LDL cholesterol particles. Pacific Islanders who consumed a majority of their calories from healthy saturated fats raised their total cholesterol, mainly from their “good” HDL rising. Another meta-analysis published in the British Medical Journal found no association between increased saturated fat intake and heart attack, stroke, and death risk.

A randomized control trial published in the American Journal of Clinical Nutrition found a diet rich in fats, including a high percentage of calories from saturated fats, actually lowered cardiometabolic risk factors: HDL came up, triglycerides came down, insulin sensitivity improved, and blood sugar was lowered.

The context and quality of a total cholesterol panel is so much more important than looking at a total cholesterol above 200 and deeming it “bad.” It may be or may not be. The research shows that saturated fats like coconut oil seem to improve the quality of cholesterol while also increasing the quantity.

A growing number of studies show similar results: that lowering dietary saturated fat and cholesterol did not decrease heart attacks. The problem with saturated fats like coconut oil occurs when people eat them with refined grains (which turn into sugar) such as breads and pasta or sugary foods. This “mixed meal” combination amplifies the inflammation of sugar. So, if you’re not going to eat vegetables and avoid carby junk foods, I suggest limiting your saturated fat intake and always focus on quality, real-food (and organic when possible) sources.

12. EAT ORGAN MEATS

A real food multivitamin is organ meat. Powerhouse superfoods, like liver, have been consumed by abundantly healthy societies throughout history, but now are eaten sparingly in modern Western society. The liver is a storage organ for many important brain nutrients, like vitamins A, D, E, K, B12, and folic acid, and minerals such as copper and iron. A great way to get these nutrients is through a liver pate. Fermented cod liver oil is also a great option, and comes in different forms like gels and capsules if you want to take it in a whole-food supplement form.

13. GET QUALITY SLEEP

Quality sleep is essential for cellular repair and vitality. Poor sleeping habits, whether from conditions like sleep apnea, insomnia, or just erratic work schedules, have been linked to accelerated aging and an increased risk of heart attack, stroke, diabetes and telomere shortening. The individual cause of your poor sleep will determine the treatment. Seeing a functional medicine practitioner or other qualified health care provider should be a priority if you are experiencing poor sleep.

14. SUNLIGHT

It's no secret that a lot of people are deficient in vitamin D. Our culture lathers up with toxic sunscreens and avoids the sun like the plague. But moderate sun exposure is healthy for most people. Vitamin D has many jobs, and one of them is its critical role in making your endorphins.

If you live in places that don't always have strong sunlight, or if you work inside a lot, then get your vitamin D from the foods you eat. When we consume the dairies and fats listed above, from animals who live outside in the sunlight, they will have plenty of vitamin D in their fats.

As I've said earlier, these are pieces of the puzzle to regain your health, not the entire picture. Hormonal imbalances, food intolerances, chronic infections, toxicity, and nutritional deficiencies are all factors that need to be investigated for the individual. A comprehensive health program tailored for you and your unique needs will be necessary to create sustainable results.

We coach people all around the world through our virtual Functional Medicine clinic. Phone and webcam consultations offer people personalized natural healthcare wherever they are. Take advantage of our [free evaluation](#) to get your questions answered and to see if Functional Medicine is right for you.

Call 724-772-9833 if you are in the united states or visit www.drwillcole.com.