

Become a Biohack Doctor

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Author's Note: This is the introductory article in a recurring series on my own biohacking journey, what I've learned and brought to my patients, and how you can become a "biohack doctor" yourself. The following tips are not just for your patients; they apply to *you*, too. We have to set the example.

Biohacking is the blending together of sports medicine, performance optimization, anti-aging, regenerative medicine, aesthetics, integrative medicine, metabolic medicine, nutritional medicine, longevity, and what chiropractic was originally taught to me as: a holistic practice approach.

Wear-and-tear thinking is old school, but *wear-and-repair* thinking is biohacking. Biohackers are addressing and unleashing fresh ideas to help create a more "youthful you" and longer healthy lifespans (longevity). This has been my practice space for the past 10 years. Incorporating what I know as a sports medicine, nutrition and rehab doctor has given me special insights.

Top Biohacks Patients Want

Biohackers want to feel younger, fight the rise in chronic diseases and stay ahead of genetic risks to achieve longevity. They are willing to experiment like crazy with supplements, diet, intermittent fasting, sleep hacks, and other lifestyle changes ... or die trying!

Biohackers are willing to step up normal things we are already doing to live healthier. The obvious interconnected wheels of wellness to create longevity and experiment with hacks include diet, exercise, sleep, digestive health, cardiovascular, hormones, stress and inflammation, detoxification pathways, aesthetics, and brain health.

Today, the immediate postsurgical therapy for a top athlete, celebrity or anyone who can afford it begins months before the surgery by improving *cellular health*. We are looking to enhance mitochondrial function; this may include using hyperbaric oxygen, cryotherapy, radiowave thermotherapy and shockwave pulse therapy, bagging it with ozone and light therapy, and stem cells.

Biohacking doesn't have to be complicated. A biohack can be as simple as recommending using baking soda in coffee (to help neutralize the acid) or taking a teaspoonful ½ hour before the first meal of the day. (It's a performance enhancer.)

As a chiropractor, of course, my most sought-after hacks still involve helping people get out of pain, correcting posture, and improving and maintaining range of motion. Most people are losing range of motion as they age, and this physically and emotionally hurts and makes you feel old at a certain point. Improve poor posture and restore lost range of motion, and you'll feel young.

Five other top hacks for my patients are sleep, hydration, weight optimization, sun and light

optimization, and oxygen optimization.

Not Just for Your Patients

As a chiropractor, you - and every one of your patients - should be getting an annual physical, preventive screens, a microbiome test and predictive genomic testing (DNA tests) to learn about any risk factors. Particularly if you are generally healthy, this testing is a way to learn if you have a genetic predisposition to certain health conditions that haven't presented any symptoms.

The Mayo Clinic found that more than one in 10 patients who participated in predictive genomic testing had a hereditary risk for a health condition and could benefit from preventive care or other treatments to reduce the risk of illness.

Consider colon cancer: When predictive testing shows a high risk for colon cancer, your doctor would advise colon cancer screenings starting at a younger age and screening more frequently than the standard recommendation.

Consider high cholesterol: About one in 250 people has high cholesterol due to a genetic disorder called familial hypercholesterolemia. Cholesterol levels can be managed in many ways. Without this knowledge, initial treatment might not be effective.

Biomarkers That Matter

Biohackers want to know biomarkers that measure the quality of their health and predictors of longevity. "Telomere length" has been shown to be a valid test to help predict long-term health. It measures the ends of the chromosomes (telomeres); their length correlates with survivability. Important bloodwork biomarkers include:

Lymphocyte Response Test for *food sensitivities*: the goal is to be tolerant and not have any delayed sensitivity reactions. (This is different from allergy testing.)

There is a whole series of *inflammation markers* or cytokines such as TNF alpha, C-reactive protein and interleukins. Someone with mast cell overactivity could benefit from a specific diet or supplements to reduce inflammation.

Homocysteine levels should ideally be below 6. Doing a vitamin C cleanse by taking vitamin C to bowel tolerance levels can help homocysteine levels.

The first morning *urine pH test* is a way of measuring the risk of magnesium deficit in the cells. Magnesium and potassium are the minerals that help cell alkalinity. When we get into a slightly acidic state, our cells become depleted energetically.

You need one molecule of magnesium for every molecule of ATP and when magnesium is depleted, the cells shift from an active elective-protective mode to survival mode. Our morning urine pH should be between 6.5 and 7.5; below that means metabolic, cellular acidosis.

Optimal vitamin D levels should be between 50-80 ng/mL. Vitamin D is really a neurohormone; it communicates with cells and has an anti-cancer function, pain-relieving function and gut function.

Omega-3 index should be greater than 8 percent. Reducing omega-6 levels is an anti-inflammatory

strategy. Biohackers recommend not cooking with low-temperature oils; instead, use lard, ghee, broth, or freshly made juice. Olive oil can be used *after* foods are cooked.

8-oxo-guanine(aka, 8-hydroxy-2-deoxyguanosine) is a measure of *oxidative damage* in the nucleus of your cells, including the DNA in the mitochondria. If you have too much 8-oxo-guanine, it means you need to take in more antioxidants.

"Optimize" important numbers. I say to patients. "I don't want you normal, I want you optimal." I just turned 64! I celebrated the 50 percent mark of my life (give me a little slack, it may be a bell curve). I'm excited to continue sharing with you as The Biohack Doctor.

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