

## 10 (More) Things I'm Changing To Better Manage My Hormones

*Men just want one thing...and it's a girlfriend (wife) who eats steak and will nod and smile as we go on a deranged conspiracy theory rant.*

- *Carnivore Aurelius (twitter @AlpacaAurelius)*

I do several things that I believe have helped me improve my health substantially over the past few years. I learned a lot of this through trial and error by trying different things over the years. I've been working on this for many years. At this point, I feel as good as I've felt in my life. The things that used to cause me problems no longer do. I'll take it! I'm ready to take things up a notch and fight a problem that is a tough one to fight. But I'm ready!

Our bodies are made up of cells (pictured here):



<https://twitter.com/microscopicture/status/1520859755547398149?s=20&t=2dVGbHEOPfXIWhIoWLKvig>) That is a lot going on in a small space. I'm not a scientist and don't know much about all that so I have to stick with common sense. Most everything detailed here is common sense and back to the basics. This approach works in most areas of my life and will likely work here too.

Things I've been doing already:

1. **Strength Training** – I've been doing the Starting Strength program for a little over two years. Easily the best decision I ever made was to start this program. Everyone should strength train and I believe there is no better program for this than Starting Strength. Physical strength is THE most important thing in life. Whether we want it to be true or not...it is! Strong people are harder to kill! Get Mark Rippetoe's Blue Bible and study it!

- a. My thoughts after one year on the program - <http://deanorolls.com/2022/01/09/2021-fitness-update-second-year-of-weight-training/>
  - b. My thoughts after two years on the program - <http://deanorolls.com/2020/12/13/1-year-lifting-weights-my-progress-and-what-ive-learned/>
  - c. If you want to do the program I'd recommend you listen to these podcasts: <https://deanorolls.com/2022/06/30/starting-strength/>
2. **Remain Insulin Sensitive** – Over the past few years, I've adjusted my diet and how I eat to not become insulin resistant. By the way, I was. I was a middle-aged fat person headed toward nowhere good. When I turned 40 I decided I was going to fix that. A basic measure of this is your waistline should be half your height. Becoming insulin-resistant increases your risk of all kinds of debilitating illnesses (heart disease, stroke, cancer, hypertension, or diabetes). I generally follow the work of PD Mangan on diet.
- a. **Intermittent Fasting** - I usually intermittent fast for 16 hours a day and eat 8 hours a day (or less). This lets my system reset. It reduces inflammation, reduces oxidative stress, leads to increased numbers and quality of mitochondria, and increases autophagy, the cellular self-cleansing process. It is okay to be hungry sometimes!
  - b. **Weight Training** - I try to stay lean (by increasing my muscle mass). Weight training adds muscle (or at least slows the breakdown of my muscles as I age).
  - c. **High Protein Diet** - A lot of steak and eggs! I eat a lot of meat (to keep my protein intake high). When added with weight training this helps to keep/gain muscle mass. I eat predominantly a ruminant animal protein diet (lamb, beef, bison, venison) with eggs and fish. The high omega 6 to omega 3 ratio in chicken, dairy, and pork are less effective sources of protein. The reason I bought a small farm is so I can harvest the sun's rays to grow forage, that I can feed to a ruminant animal, that I can convert into feed for me. All while improving the land. #sustainable
  - d. **Cut Added Sugar** - I try to eliminate all added sugar from my diet. Added sugar has all kinds of nasty impacts on our bodies. This has been very hard for me because I have a sweet tooth.
  - e. **Cut Processed Carbs** - I try to eliminate all processed foods (refined grains) and eat as many whole foods and nutritionally dense foods as I can.
  - f. **Cut Seed Oils** - Cut out seed oils (eliminate linoleic acid). This is damn near impossible to do with the rise of seed oils being in everything we eat. This coincides perfectly with the rise of all kinds of bad stuff happening to us humans (not ironically). Toxic Sludge!
3. **Get Sun** – I try to get plenty of Vitamin D from the sun year-round. It is very hard for me to slow down and just lay in the sun a few times a week. I have to make myself do it. This also helps with stress.
4. **Dump Iron** – In the past six months I've added regular blood donation into the mix to decrease the iron level in my blood. I measured my ferritin level and will do it again at the one-year mark. I expect my iron level to be much lower. Having high iron is believed to cause all kinds of debilitating illnesses. Even if I'm wrong it is a win-win. The Red Cross can use some of this Deano's Blend Tiger Blood! Read more here: <http://deanorolls.com/2021/12/10/dumping-iron-p-d-mangan/>

My son, Preston, has researched hormones and how our bodies are constantly inundated by all kinds of harmful things in our daily lives. His findings align with prior research I've done on seed oils, testosterone, and agricultural chemicals. At first, I did what most people do, I shrugged it off. "That stuff is in everything there is no way to get away from it. There is no use fighting it." I put it on my to-do list to do more research, however. This write-up is the result of that research. I found out that I was already doing many things in my daily life correctly. I intend to make many modifications to the way I go about my days, however. This will be a long process and will take time to implement.

## First, why is all this hormone stuff even important?

The primary female sex hormones are estrogen and progesterone, which means men's primary sex hormone is testosterone. However, women do produce small amounts of this as well. Similarly, men also produce small amounts of estrogen and progesterone. The problem in today's world is that both sexes are inundated with estrogen mimickers which throw both sexes' hormones completely out of whack. NOTE: This is bad! I found the following three bullets somewhere that summed up the issue very well.

- **Estrogen Dominance** - Estrogen Dominance is when we have too much estrogen or estrogenic metabolites or estrogen mimickers known as xenoestrogens.
- **Xenoestrogens/BPA** - A well-known toxin in our environment is BPA. Bisphenol A (BPA) is a known xenoestrogen (estrogen mimicker) that influences Estrogen receptors in the body inducing Estrogen Dominance. BPA is also found in sweat which shows us that sweating is one way we can rid our body of it. We have discovered that harmful BPA is found all over our environment in canned food, hard plastics such as baby bottles or water bottles, plastic microwaveable containers and so much more. So even if your genes do not predispose you to Estrogen Dominance, the toxins in your environment such as BPA could cause this to happen. Sweating is one of the most effective ways to get it out of your system!
- **Low Progesterone and Testosterone and Decreased Bone Density** - As we age and go through menopause or andropause, our progesterone and testosterone decrease which causes some bone loss. As our body breaks down bone, we also can release bone-loving heavy metals such as lead. Throughout our life, we can store lead that we have been exposed to in our bones. Our bodies are always breaking down bone and rebuilding it, but as we get older, we tend to lose more bone than we rebuild. This process means as our bodies break down our bones, we concurrently release lead into our system. To help get the lead out of the body, we need to sweat. By sweating regularly, we help avoid the re-circulation of lead in the blood and tissues or being reabsorbed back into the bones. By increasing our core body temperature by exercising or by taking a sauna, we can

mobilize, excrete and eliminate harmful metals such as lead from our bodies through our skin. As we rebuild bone as we age through strength training and nutrition, we want to be sure the lead doesn't make it back to our bones! Other harmful metals that can be excreted through the skin include arsenic, cadmium, and mercury.

In doing this research I found nothing that made me think I needed to stop doing any of the four things I've listed above (in fact they all help the cause). Everything I think I need to do is in addition to those things. Hence the title: 10 (More) Things I'm Changing To Better Manage My Hormones.

Many recommendations in this write-up come directly from using Dr. Anthony Jay's list to eliminate harmful ingredients (mainly fragrances).

<https://www.ajconsultingcompany.com/whatiuse.html>

This list is in priority order!

# 1. Don't Use Plastics

Different plastics present different safety considerations but in general, plastics should be avoided (as all plastics can leach toxic chemicals, especially if heated or damaged). Plastics are given 'recycling numbers'. These numbers can help you easily identify plastics that are safer to use than others. In short 2, 4, and 5 are safest and 1, 3, 6, and 7 should be avoided.

1. **POLYETHYLENE TEREPHTHALATE (PET or PETE) – AVOID** – Most frequently used in water and beverage bottles, food jars and containers, salad dressing and oil bottles, clothes fiber, and mouthwash bottles. Plastic #1 is usually clear in color and it is not intended for multiple uses.
2. **HIGH-DENSITY POLYETHYLENE (HDPE) – OK** – One of the safest plastics, with a high strength-to-density ratio and can be recycled many times safely.
3. **POLYVINYL CHLORIDE (PVC) – AVOID** – Very dangerous and least recyclable. Strong and elastic due to softening chemicals, – phthalates. They cause great problems with the hormonal system. Can be found in shower curtains, cleaner bottles, pipes, cooking oil bottles, window and door frames, floors, and clear food wrap. Use as seldom as possible.
4. **LOW-DENSITY POLYETHYLENE (LDPE) – OK** – Not very recyclable. More elastic and is usually used as bread wrapping, squeezable bottles, shopping bags, packaging foam, trays and containers, and other plastic wraps.
5. **POLYPROPYLENE (PP) – OK** – Second-most widely produced plastic. Being light, heat resistant, and sturdy (said to be microwave safe but not recommended). Commonly used in yogurt containers, liners in cereal boxes, disposable diapers, plastic bottle tops, kitchenware, disposable plates, cups, and cutlery.
6. **POLYSTYRENE (PS) – AVOID** – The problem with plastic number 6 is its fragility: it breaks up easily and goes into the environment. Tiny pieces of PS can be found on many beaches and in marine creatures. Moreover, #6 plastic contains styrene which can be leached while heated. It is harmful to health and can cause carcinogenic effects.

7. **OTHER/POLYCARBONATE(PC) - AVOID** – Everything else (not included above). Most contain highly dangerous BPA (Bisphenol A).

To put that into practice I'll make the following modifications.

- **WATER BOTTLE** – Whatever you are drinking from (and eating on) shouldn't be made of plastic. What should you look for in a water bottle? Stainless steel or glass. Stainless steel bottles are slightly insulated, which helps keep down condensation. Look for ones with fairly wide openings, which allows you to insert a scrub brush for cleaning. NOTE: Once you put coffee in stainless steel, it always has a slight coffee smell.
  - I will use Yeti stainless steel cups exclusively for drinking from now on. They work well and the plastic lids are BPA (Bisphenol A) free. Tritan is a BPA-free plastic — it is not manufactured with bisphenol A (BPA) or other bisphenol compounds, such as bisphenol S (BPS). Tritan has no estrogenic or androgenic activity. Allegedly! That said I will only use the lid when I'm mobile and a spill is imminent.
  - Hydro Flair Stainless Shaker Bottle (plastic-free including the top). I intend to switch to these for my protein shakes (away from the current plastic bottles I use now). I might also just use a glass mason jar.
- **FOOD STORAGE BAGS** – Most food storage bags are made of polyethylene which is a safer plastic to use. But, it is still plastic. Stasher (plastic-free, 100% non-colored silicone) require an upfront investment but they will last for years and you can even be comfortable doing sous vide cooking in these bags (which you would never want to do with plastic food storage bags). If you must use plastic bags/wrap be sure to never heat anything in a plastic bag or container.
- **CAST IRON or STAINLESS STEEL COOKWARE** - Replace the nonstick pan with cast iron or stainless. The nonstick coatings leach all kinds of nasty things into your food. To keep things from sticking use butter, ghee, or an oil (that is not a seed oil).
- **SHOWER CURTAIN LINER** - The worst shower curtains are PVC/vinyl (and to a lesser degree polyester). They off-gas estrogenic chemicals.
  - Option #1 - Cotton is ideal (free of polyester, PVC, toxic coatings, and incorrect labeling). It is a renewable resource, is readily biodegradable, and can be surprisingly water-resistant when properly woven. But cotton is also very high maintenance in terms of cleaning to prevent mildew growth.
  - Option #2 - Ty, is plastic but it's safe in terms of your health. Some people complain Ty curtains are lightweight and they billow up when the hot water is on, so be aware of that if you have air-flow issues in your bathroom.
  - Option #3 - Nylon, is also safe and effective as a shower curtain material. Be extremely cautious when buying 'nylon' shower curtains, however. Many (hopefully) well-intentioned companies label their curtains "nylon" but the shower curtains are actually 100% polyester. Polyester is a phthalate-derived material and will off-gas some phthalates, especially with hot water and steam. It's not as bad as PVC or vinyl but it's something I try to avoid.
- **BLENDER** - Oster Pro 1200 is powerful and free of plastic. Most importantly, being plastic-free means you can make various hot coffee blended concoctions.

- **NO NEW CARS** - That new car smell is deadly. Open the windows on hot days and let it out before you breathe it all in! I like this rule because I like to buy slightly new cars and let someone else take the depreciation hit. Now I can also let them absorb most of the harmful hot plastic byproducts for me as well.
- **CAN OR PLASTIC FOOD CONTAINERS** – Some foods come in cans and some only come in plastic containers (like milk). You can either avoid these foods (which is nearly impossible in many cases), seek out alternative containers, or at least make sure the plastic containers you do bring into your home are on the ‘safer’ list and the packaging of the canned goods don’t have harmful plastic coatings.

## 2. Filter Your Drinking Water

- **DRINKING WATER FILTERS**
  - Never drink from a plastic bottle (use glass or stainless steel glass).
  - Our refrigerator water filter seems to be decent (Frigidaire Puresource3 filter). I’ve not been diligent about changing it but will start doing that now.
  - I will also probably begin using a Berkey system. These are stainless steel (and you can add a stainless steel spigot). They allow you to filter plenty of drinking water and remove all kinds of bad things. They are not as good as a reverse osmosis system but are much cheaper and more portable. You can add a fluoride filter to the system but I’m not sure I’ll do that at this time. I need to research this more.
  - We might ultimately install a filtration system like the Purify Guru Tankless Reverse Osmosis System. It removes estrogenic chemicals, fluoride, pesticides, herbicides, plastic chemicals, pharmaceuticals, and heavy metals. You can install this on your kitchen sink. Reverse Osmosis is about the only way to strip everything from the water (including fluoride, which the other filters don’t get). It also strips beneficial things (so they get added back).
  - For a mobile filtration system (or in a pinch) you can use a Berkey (with the plastic spigot replaced by their stainless steel spigot and the fluoride filter) or use a plastic pitcher filter (e.g. Brita) and pour the water out of the plastic into a glass pitcher for storage. These mobile systems are not as good as less mobile solutions because the Berkey only removes 75% of the glyphosate (RoundUp)! But they beat not filtering at all.
  - Also, if you want to use a different brand, the key principles to follow are:
    - avoid plastic, including storage tanks, look for stainless steel, and
    - include activated charcoal. Activated charcoal (sometimes called "carbon") removes estrogenics. It grabs a lot of pharmaceutical drugs, too, but removing estrogenics is key due to inheritable health impacts. Use activated charcoal to filter your drinking water and shower water too (because things absorb through your largest organ...your skin).
- **COFFEE MACHINE**
  - Keurig - I currently use a Keurig. Keurig coffee makers are all plastic AND the K-Cups are especially concerning. They are made of BPA-free plastic but it is coded with a 7 which is not OK. Also, the plastic is heated which is never a good

thing. The lid is usually made of aluminum (which leach when exposed to high heat and acidic coffee). This is the same reason you shouldn't wrap food in aluminum foil to cook it. Aluminum has been linked to Alzheimer's, anxiety, autoimmune diseases, and even depression. Not to mention the bacteria and molds growing in the machine that are harming your microbiome. So, after years of using Keurig, I'm going to ditch it.

- French Press / Pour Over / Stainless Steel Percolator – These make a fine cup of coffee but take a good deal of time and also can leave a good deal of sediment in the coffee (if not using an extra filter). I've tried this and it isn't too appealing for me.
- Cold Brew CoffeeSock – Dr. Jay uses this product since it is organic, reusable, and plastic-free. He says: I exclusively make "cold" brew coffee by putting freshly roasted, fresh burr ground coffee into a Coffee Sock, which then goes into a giant glass jar of room temp water. This sits overnight, the sock comes out, and the coffee then goes into the fridge. Next - and this is key - I dilute it a bit with purified water and I heat the coffee in the microwave. It's technically called "hot press" if you want to try it at a coffee shop. Super fast, phenomenal taste. It's always a happy shock to visiting friends "how amazing this coffee is", especially if I'm using my favorite green beans.
- **HOUSE PLUMBING** - Modern PVC pipe is fine for cold water but not recommended for use with hot water (use copper instead, with lead-free joints). Again metal > plastic. Our house has copper pipes. This is good because I didn't want to have to rip out the walls and replumb the entire house. HA [kidding...maybe]! When we finish the farm space I will be using copper for our pipes.
  - Rainwater – I've also done some initial planning on harvesting rainwater runoff (from our building for use on our farm). I haven't decided if I'll use it in our home yet or not.

### 3. Manage Personal Care Products

These products are things most everyone uses daily and they are loaded with all kinds of bad stuff. The biggest culprit in almost all these products is fragrances. If you can find products that don't have a fragrance you are on the right track. Other products have active ingredients in them that work well (sunscreens, detergents, deodorants) but are also not good for us. Some of these products (without the effective active ingredients) might not work as well as the more toxic ones...oh bother!

*If you're an average person using regular deodorants, shampoos, conditioners, body washes, cosmetics, colognes, and cleaning products...you're getting over 200 synthetic chemicals into your bloodstream a day. Phthalates, xenoestrogens, BPA, BPS, etc. Explains so much illness. - Carnivore Aurelius (twitter @AlpacaAurelius)*

The listing below is directly from Dr. Jay's website of products he uses instead of the normal ones that most people use. I edited this a little but it is mostly intact.

- **BAR SOAP** - Kirk's Original Coco Castile Soap, Fragrance-Free (free of common things like Red No. 40, parabens, phthalates, titanium dioxide, etc.)
- **HAND SOAP** - 7th Generation Liquid Hand Soap Refills, Unscented (free of parabens, phthalates, questionable fragrances, Red No. 40, benzophenone, triclosan, etc.). Bonus points for using a glass dispenser (but it doesn't matter too much).
- **SHAMPOO / CONDITIONER** - JÄSÖN, Fragrance-Free (free of parabens, phthalates, artificial fragrance, etc.)
- **DISH SOAP** – Any
- thing
- **LAUNDRY DETERGENT** - Seventh Generation Natural Laundry Detergent Packs (Powder) or Free and Clear. You should especially avoid benzisothiazolinone preservative since it is likely to stay in clothing and is nasty stuff. Dr. Jay avoids anything with the words "benz-" or "phen-" in them. He also avoids methylisothiazolinone and of course, phthalates which have been shown to leach from clothing and spike blood levels. Laundry detergent is a tough one: I appreciate having enzymes in laundry detergent to break down stains (I especially look for these 3 categories of enzymes: lipases, proteases, and amylases) but bacteria chew up and destroy enzymes in liquid without preservatives. And preservatives remain in clothing! This is why I love dry laundry powders. Powders maintain enzyme shelf-life without sketchy preservatives because bacteria cannot "swim" around in powder and "eat" the enzymes (enzymes are proteins). I'm ok with a liquid "enzyme-spray" stain remover now and again, but I don't compromise on overall detergent.
- **DEODORANT** - Schmidt's Natural Deodorant, Jasmine Tea, Sensitive Skin Formula (free of parabens, phthalates, questionable fragrances, lavender, aluminum, titanium, etc.). First, if you decide to go off "aluminum zirconium tetrachlorohydrate gly", it will take about a week for your body to detox some of the smelly buildups. Just be patient and preferably go deodorant free for that one week. Next, find a deodorant without aluminum or titanium. This is extremely difficult. I'm especially against the daily use of aluminum deodorant due to aluminum "bioaccumulation" or bodily "buildup" (especially within the brain)!?! But even short-term spikes in blood aluminum from a deodorant can result in levels problematic for health. Finding a healthy deodorant that also is effective and affordable is a whole new level of challenge. Metals in deodorants function by closing sweat pores and toxic metals also kill bacteria. This is where "essential minerals" like zinc and magnesium are key. I've done some extensive experiments with deodorants, comparing your typical "aluminum zirconium tetrachlorohydrate gly" deodorant and other deodorants with preferable ingredients. My main method of testing is one brand under one arm and another brand under the other arm. Most "natural" deodorants use glycerol or baking soda (sodium bicarbonate) and do not work (at least for me). Everyone is different, though. Schmidt's uses magnesium and works superbly but only their "Sensitive Skin Formula". You might also try "Green Tidings, Calendula, and Sage", which is often preferred by women because it is a "skin" color, rather than white. The Green Tidings deodorant also has magnesium so it tends to work. Finally, a DNA consulting client recommended "Native" (which contains Magnesium) and that has become my new favorite due to its ease of application and nice gentle scents. Finally, for a cheaper deodorant, Jason recently came out with a decent zinc deodorant. Skin application is much smoother than Schmidt's and Jason's is much

cheaper. Plus Walmart carries it so you can avoid shipping costs. Neither the effectiveness nor ingredients are quite as excellent as Schmidt's but I still appreciate this one.

- **SUNSCREEN** - Babo Botanicals Sheer Zinc SPF 30+ Spray or Adorable Baby Sun Lotion (free of estrogens like 4-MBC, benzophenone, oxybenzone, and other "-benz" and "-phen-" chemicals, free of titanium, etc.). Opt for clothes instead of sunscreen as much as possible. My book, Estrogenation, has helped influence lawmakers to outlaw conventional (American) sunscreens in numerous areas containing coral reefs. They have fertility-destroying chemicals like oxybenzone (aka "benzophenone-3"). And did you see the 2019 study they finally did on sunscreen? "Plasma concentrations reached the [FDA's own limit] threshold within two hours after a single application and exceeded 20 ng/mL on day 7 [the limit is 0.5 ng/mL]." Alternatives!?! Sunscreen with +20% or more zinc. That's the key. Oddly, however, even with +20% zinc, I have found that some major brands with incredible ingredient lists simply did not work for me - even with 30-minute reapplications. I've tested about 10 brands, one on each arm, during fishing trips. Many gave me bad burns, especially when I included swimming. But I'm as white as Jim Gaffigan, so I'm hyper-sensitive. Adorable Baby works excellent for me and doesn't make me look like a white-skinned ghost. Babo also works excellent for me and they make a convenient spray. I recommend you shake like crazy each time before spraying.
- **SHAVING CREAM** - Kiss My Face, Fragrance-Free (free of BHT, fragrance, parabens, phthalates, etc.). I just use soap.
- **TOOTHPASTE** - Hello and Bites Bits, only Fluoride-Free Versions (free of things like parabens, phthalates, carrageenan, SLS, fluoride, etc.). I realize you spit the toothpaste out. Kids don't but you probably do. Despite the spitting, I'm convinced people still ingest too much fluoride with standard toothpaste. Also, the inflammatory substance "carrageenan" is present in most and carrageenan can inflame your gums just like SLS, so I avoid this and suggest you do as well.
- **CLOTHING/BLANKETS** - 100% Cotton (free of polyesters, i.e. phthalates) I think it's smart to avoid polyester (which is plastic fluff made from nasty phthalates) since we're sleeping in it all night.
- **INSECT REPELLENT** - Mosquito Head Net, Body Suit, and Badger Anti-Bug Balm Sticks (free of a laundry list of questionable chemicals). With the ever-spreading tick-borne Lyme disease, anti-mosquito netting (both an anti-mosquito head-net as well as a full-body anti-mosquito suit.) is the ideal major preventative measure against years of Lyme symptoms. The Badger Anti-Bug Balm Sticks are also excellent for that occasional social occasion when you and your children can't be seen in full bug SWAT gear. It does have concentrated citronella, which is estrogenic, so don't use it too often. But it's the best choice I've seen to date. Don't use citronella candles either (since you'll be breathing in those chemicals). Spraying clothing is one thing but be cautious about spraying synthetic chemicals on your skin.
- **CANDLES** - Big Dipper Wax Works Handcrafted Beeswax Candles (free of lead "stand-straight" wicks, petroleum products, soy, lavender, and artificial fragrances or chemicals).
- **LOTION** - Nose to Tail Beef Tallow and Emu Oil (free of parabens, phthalates, questionable "fragrance" ingredients, butylated hydroxyanisole, triethanolamine, etc.). First, if you have skin issues, they might be DNA-related. Check the histidine

section below. The "lotions" listed here are a bit oily, unfortunately, but often work excellently. Just keep in mind everyone responds to different lotion potions differently. Nose-to-Tail Beef Tallow lotion is excellent with pure, grass-fed beef ingredients that are extremely similar to our natural skin lipids without chemical shenanigans. Emu oil is also amazing and backed by a surprising amount of scientific research. And just so you know, we're not plants (!), so animal oils make more intuitive sense [at least to me], in providing our skin what it needs. Full disclosure: I rarely use lotion. I find if I use lotion once, my skin becomes addicted to it and eventually I have to deal with dry skin anyway, to wean off the lotion.

## 4. Sweat

Preston has been preaching the use of the sauna for a long time. I didn't think it was very important. I now realize I don't sweat enough. I often prefer to sit inside my air-conditioned house. I'm rethinking this. I also just bought a farm where I sweat A LOT and OFTEN!

Our bodies need to sweat to help take the trash out. Our liver and kidneys and lungs also share this burden. If we are not also sweating, then we are giving all the work to our liver, kidneys, and lungs. Sweating is an essential component of overall health, including detoxification and hormonal balance. Estrogen goes through 3 phases of a metabolic detoxification process in the body. The first 2 are in the liver known as phase I detoxification (using the Cytochrome P-450 Enzymes) and phase II detoxification (conjugation to an excretable form), and the 3rd is how the Estrogen metabolites get OUT of the body. In other words, which exits are open to get it out! Exits include bodily functions such as how well we poop, if our kidneys can send metabolites out in the urine, or even via SWEATING through the skin. By regularly sweating, you will help the overall toxic burden on the liver and support estrogen detoxification. If our exits are backed up, then these harmful estrogen metabolites continue in circulation in the body. Sweating helps get toxins out via the skin and reduces the burden of toxic overload on the liver and kidneys. Using a sauna is a great way to sweat. Our bodies can detox harmful environmental toxins which impact our hormones. We can also support our hormones with regular sweating. Taking a cold shower after your sauna session will help regulate your body temperature and rinse your sweat that contains all those harmful toxins you just sweat out! Showering and toweling off afterward will minimize the reabsorption of toxins. Keep in mind that sweating will deplete some vitamins and minerals as well as electrolytes in the process. Be sure your nutrition includes plenty of B-vitamins, Magnesium, Zinc, Selenium, Iron, Vitamin C, and Calcium, and electrolytes such as sodium and potassium, as all these are necessary for detoxification processes and sweating recovery. If you feel dizzy and depleted, you may need more nutrient support with electrolytes and minerals. The sweating and detoxification process uses up a lot of these nutrients, so it is important to make sure there are plenty in your diet.

## 5. Get Sunlight- Get that Vitamin D.

I already try to get sun even in the winter. These might make it easier on really cold days when I can't stand laying out and freezing to death.

- **INFRARED LIGHT** - Joovv Mini (provides therapeutic doses of infrared fairly quickly, is long-lasting, low EMF, and a well-characterized device)
- **VITAMIN D LAMP** - Sperti Vitamin D Sunlamp (provides the correct subset of UVB wavelengths to create vitamin D in your skin at 12 inches distance - great for that seasonal affective disorder gene)

## 6. Eat Well

- **Cut Added Sugar** - When it comes to dietary offenders, there are few more hormonally-disruptive bad guys than sugar. When you consume too much of it, it sends your blood sugar and insulin levels soaring and then crashing (which leads to estrogen dominance). Cleaning this up (keeping below 10% of daily calories) can balance everything out in less than 2 weeks.
- **Gut Healthy** - Having a healthy gut means having a healthy estrobolome—and a healthy estrobolome efficiently eliminates used hormones from the body, preventing estrogen build-up (and all the problems that come with it). But in our modern world, everything from a sugar-rich diet to overuse of antibiotics (and even the birth control pill) can throw your gut bacteria off-kilter, increasing your chances for estrogen dominance. A low-sugar diet helps here again. Increased dietary fiber intake elicits a wide range of physiologic effects, not just locally in the gut, but systemically. Fiber helps support the liver, a critical organ necessary in the detoxification process that helps prevent and heal estrogen dominance. Fermented foods and probiotics also work well. Gut health can change quickly, microbiome composition changed detectably within just 24 hours of initiating a high-fat/low-fiber or low-fat/high-fiber diet. And the research indicated that the longer participants adhered to specific food plans, the more significant the changes to the bacteria were, which should show you that committing to a hormone-healthy diet for the long haul is your best bet for continued success.
- **Eat Organic** - Switching to an organic diet reduces the harmful, endocrine-disrupting pesticides in your body by nearly 90 percent. Can drop 90% in a week (test via urinary dialkyl phosphates (DAPs) — a common method of assessing exposure to pesticides). Various herbs and spices may help the body excrete excess estrogens, including turmeric, rosemary, mint, chives, sage, flax, pumpkin, and chia seeds. It's advisable to eat a high-fiber diet with plenty of fresh fruit and vegetables (organic if possible). Try to avoid high-fat, high-sugar foods, and foods with artificial colors and flavors.
- **No-Go Items** - Canned foods, genetically modified (GM) foods, and items containing monosodium glutamate (MSG).
- **Grass-Fed** - Eat grass-fed beef (to avoid any molds in grains fed to grain-finished). I guess this means limiting other grain-fed meat options.

## 7. Exercise

Cardio exercise helps the body break estrogen down and flush away any excess. Also helps with additional sweating!

I already exercise a good amount. I usually lift weights 2-4 days a week. Emily and I walk often and I enjoy riding my bike. I do not do any 'cardio' in my current plan. I need to incorporate some type of cardio activity into my plan. I've thought about adding in some HIIT on my off days from the gym. I don't want to do anything that will interfere too much with my weight training.

## 8. Lower Stress

It turns out that the intake of vitamins, particularly the B-vitamins including B6, B9, and B12 may have many positive effects on mood and stress and be associated with a trend towards an increased Cortisol Awakening Response (CAR) (which helped healthy participants develop an adaptive response to everyday demands). Foods like bananas, wild-caught tuna, spinach, poultry, sweet potato, and more are chock-full of it — but supplements are an important insurance policy to ensure you're getting the right amount.

Sleep Well - Our melatonin levels drop when we don't get enough sleep, and this hormone is known to protect the body from surplus estrogen build-up. Research suggests that melatonin may stunt the growth of estrogen-induced cancer cells.

- **SLEEP NOISE MAKER** - LectroFan (consistent noise, travel friendly, no excessive airflow)
- **BLUE BLOCKING GLASSES** - Swanwick "Swannies" (actually needs to block the blue light). Speaking of "safe sleep", I use f.lux on all my computers and my smartphone. It blocks blue light from the screen on a circadian rhythm. I also keep my bedroom pitchest of pitch-black while sleeping using black-out curtains. Many curtains claim to be "light-blocking" but aren't even close, so read reviews and return the curtains if you can put them over your head and still see light coming through the fabric - as tested during the daytime. I call this the "head trick". My wife is mortified when I do it during fabric shopping trips, as she occasionally makes custom curtains. Next, I use the free "Light Alarm Clock" app put out by "sssprog" on Android. I love it! In the morning, it gradually gets lighter, before making sound, and then the app allows you to select an audio track to gently come on. The song I use is "Dirait-on" by Morten Lauridsen, not that anyone cares. Why am I writing this again? Oh yes - finally - I recommend experimenting with blue-blocking glasses in the evening if you have sleep issues. I have a small blue light on my work desktop. With cheap "blue blocker" glasses, I can still see that blue color. The Swannies I have block the blue light, which is awesome in the evenings after the sun has gone down. If you want the best-of-the-best in blue and green

light blocking with a similar price point to Swannies, I suggest going with "Safety Blue". I've never tried these but they come highly recommended.

- **SLEEP TRACKING DEVICE** - Oura Ring (won't light up green during the night, stylish, comfortable, excellent app). On the off chance, you're a Lord of the Rings fan, this is the true "Ring of Power". We all respond slightly differently to sleep-altering stimuli, so it's invaluable to customize your sleep. Not having this ring is like not having a battery sensor on your smartphone - you're left just guessing when it will shut down. Will it be working when you need it most? Who knows! I'm currently experimenting with deep sleep (memory consolidation) and REM sleep (emotional reset) changes from various essential oils, evening infrared, blue-blocking glasses, and magnesium, valerian root, L-theanine, 5-HTP, THC, CBD, and GABA supplements. If you want to join my "sleep hacking" party, be sure you approximate the same bedtime, waketime, eating times, and training times each day at least 2-weeks before starting any hacking. And stop eating at least 2 hours before bedtime - trust me!

## 9. Limit Meds

A range of over-the-counter and prescription medications can have an impact on estrogen levels. With birth control medication, you are shutting down the production of your hormones and relying on what the pill is giving you. If you're using hormone replacement therapy (HRT), you may be getting too much estrogen. Other medications such as antibiotics can also contribute to a hormone imbalance.

I'm not a fan of ANY medication. I rarely take any medication. I'll sometimes take an over-the-counter antihistamine if I have a cold. I'll take an over-the-counter pain reliever if I have a splitting headache (which is a rare occurrence these days). If a doctor forces me to take an antibiotic I will (happened once in the last decade I think) but I don't like taking those.

My preference is to let whatever is bothering me run its course and let my body fight it off. I'll save the medications for when my body can't do that and it needs some help.

I don't take any long-term medications and might never. It is going to take a lot of research for me to believe that the benefits of a particular medication will outdo any ill effects they will have on my body.

I don't believe we know the impact hardly any medications have on our bodies. I know for a fact that we have no clue what impacts taking multiple medications together have on our bodies.

*For the first 50 years of your life, the food industry is trying to make you fat. Then, in the second 50 years, the pharmaceutical industry is treating you for everything. --Pierre Dukan.*

- **COVID VACCINE** – My disdain for medicine includes not taking the experimental COVID Vaccine. If you want to know why I'll never take it look at the chart here: <https://openvaers.com/> 1.3 million people have reported an adverse event related to the

COVID vaccine. This information is from the CDC's own vaccine tracking system. 1.3 million is likely very low because most adverse events are not reported (as in a fraction...estimated to be less than 10%). But let's say it is right. Only 6.3 million people even died of COVID (<https://www.worldometers.info/coronavirus/>). Most of the people who died of COVID were old people who would likely be dead anyway. These vaccines are experimental and are not as safe as all the other vaccines released in the past. Oh, by the way, they also don't work at all. Why on earth would anyone take these things. Please, everyone, start using your brains. I've had COVID, back when it was a thing. My body's immune system fought it off after a few weeks of undulating fever. It wasn't fun and I thought it might take a turn for the worse. Regardless, that is how our bodies are designed to work. We either fight off disease or die. I'm working hard to make my body stronger and less prone to being harmed by disease. I don't need a vaccine that is far more likely to kill me (or to induce a debilitating disease) than the disease that it is designed to protect me from. The COVID vaccines are utter insanity.

- MASK – Oh, I'm also not wearing a mask because that is just stupid. <https://twitter.com/morganisawizard/status/1514051973548589060?s=20&t=2dVGBHEOPfXIWhIoWLKvig>

## 10. Supplements

There is evidence to suggest that certain supplements can help to correct hormone imbalance and reduce high estrogen counts. These include iodine, magnesium, and vitamin D. I tend to not be a fan of supplements other than a fairly regular protein isolate drink. I try to get the nutrients I need via my normal diet (which is impossible).

Dr. Jay has an extensive section on supplementation that I'll read after I work through other items on this list. <https://www.ajconsultingcompany.com/whatiuse.html>

**BOOST TESTOSTERONE** - Testosterone is way more than the macho hormone. It is critical for ALL mitochondrial function, metabolism, mood, and muscle growth. Testosterone levels in men have been falling for several decades (reduced by 50% over the past two decades). Symptoms of low testosterone include low sex drive, low energy, high body fat, loss of muscle mass, and reduced erectile function. I've previously researched Testosterone Replacement Therapy (TRT) but haven't pulled the trigger on it because I don't feel bad and don't think it is needed. I did get my testosterone level checked (when I got my ferritin levels checked) and plan to do the test again annually. I expect my testosterone will rise since I'm doing so many things that should actively be causing it to rise (despite it wanting to drop due to my aging). [sad face emoji]. At some point, my testosterone level might drop to an unsatisfactory level or I might have other symptoms that could be solved by TRT. Until then I'll pass.

I am actively working to raise my testosterone levels, however. Most of the things I'm doing to raise my testosterone are important for other reasons and have other benefits. The following list was compiled by Carnivore Aurelius but captures my plan almost exactly.

- No Dad Bod - Obesity increases the aromatase enzyme activity which converts testosterone to estrogen.
- No Seed Oils - Seed oils are the biggest endocrine disruptor in the environment. They 1) block binding of androgen receptors, 2) are estrogenic 3) lower osteocalcin, which blocks leydig cell T synthesis 4) increase oxidative stress 5) decrease enzymes that produce T. Poison.
- Short Explosive Weight Training - Short explosive and hard weight lifting sets are the best way to maximize testosterone. Longer workouts can do the opposite.
- Improve Sleep - Deep sleep is one of the most important ways to increase testosterone. Here are some tips: 1) sleep in a dark room 2) no blue light at night 3) sunlight in the am 4) fruit and salt before bed to fill up liver glycogen 5) destress before bed.
- Improve Thyroid and Metabolism - The thyroid is the master regulator of all hormone synthesis and the required cofactor for testosterone production. Many men with low t have low thyroid. Thyroid hormones, specifically T3, up-regulate androgen receptors, and down-regulate estrogen receptors. Androgen synthesis requires pregnenolone, which is synthesized from cholesterol, vitamin A and T3. Some thyroid tips: 1) lower stress (walk in the woods anyone?) 2) ensure you eat enough carbs to convert t4 to t3 3) selenium 4) sunlight 5) fix gut issues 6) play 7) magnesium 8) zinc 9) copper 10) don't overexercise.
- Lower Estrogen Intake - Estrogens block testosterone synthesis and we are bathing in them today...pretty much every new synthetic product is loaded w. endocrine disruptors: shampoo, soap, food colorants, cookware, plastic, deodorants, body wash, polyester. Two that get the most attention are BPA and phthalates, which are high in plastics, clothes, cleaning products, and many more things. Phthalates lower testosterone levels by interfering with cholesterol uptake. Microplastics are coursing through the bloodstream of just about every man and these all release estrogenic chemicals. Estrogen also increases the synthesis of SHBG which binds to testosterone, lowering free testosterone. This is why even men with higher testosterone may experience low T symptoms. Many more environmental toxins are poisoning T: mold, herbicides, food colorants, etc. Many common foods today increase estrogen. These are called phytoestrogens -- they are plant-derived components that act like estrogen in the human body. Soy is one of the most potent estrogenic foods there is. The phytoestrogens in soy, genistein, and dasein, have a higher affinity for the estrogen receptor, than estradiol -- the estrogen our own bodies produce. Soy is MORE estrogenic than estrogen. This study shows that soy phytoestrogens decrease testosterone levels. Soy has also been shown to block 5-ar which blocks the conversion of testosterone to its more potent derivative, DHT. Soy isoflavones cause feminization of male offspring when exposed prenatally. Other foods high in phytoestrogens: flax seeds (worse than soy), tofu, and to a much lesser degree hummus, garlic, pistachios, sunflower seeds, olive oil, almonds, and cashews.
- Detox Estrogen - So, cutting these estrogens out is not enough. You need to actively take in nutrients that help to lower your excess estrogen and detox it: 1) Vitamins A, D, E and k2 are all estrogen antagonists and aromatase inhibitors, 2) Vitamins b1, b2, and magnesium are crucial for liver detox
- Stop Drinking Tap Water - Tap water is a toxic tea full of carcinogens and endocrine disruptors that poison your gonads. Everything from PFAS to birth control to

fluoride...all of these have been shown to interfere with testosterone production. Fluoride is one of the bigger issues. Tiny amounts of fluoride reduced testosterone by 40% in a study. Pesticides like atrazine are in tap water which have been shown to completely feminize 75% of male frogs. THMs from chlorine in water is also associated with low testosterone. Tap water also contains pharmaceuticals and birth control which increase estrogen.

- Cut Out Gut Irritants - The gut and testicles are interconnected. When endotoxins from the gut make their way into the bloodstream they inhibit LH release, which lowers T synthesis. They also inhibit the enzymes that make T. Gut issues are ubiquitous today. Some of the most common offenders are grains, nuts, beans, and legumes (all being seeds of the plant, they are the most heavily protected). If you have bacterial overgrowths, many plant foods and starches can also trigger this endotoxin release.
- Maximize Nutrients - Your body requires vitamins and minerals to synthesize T. Some of the most important include: Magnesium, Vit D (get in the sun), Cholesterol, Vit A, B Vits, and Zinc. Many of them work together to increase testosterone. Vitamin A in particular is very important. It is one of the rate-limiting steps in T synthesis. Vitamin A combines with thyroid and cholesterol to produce pregnenolone, a precursor to T. No vitamin A, no testosterone. Eat liver and eggs.
- Sun Your Balls – Every cell and organ can benefit from the sun, especially the testes. Mitochondria need red / NIR to function optimally. UV light stimulates vitamin D which is critical for T production. Let the sun shine where the sun doesn't shine. NOTE: I have to admit I have not done this...and might never.

## Summary

None of this is easy. I've done hundreds and hundreds of hours of research on most of these topics. The people I listen to have dedicated the majority of their lives to completing the research. It is sometimes very difficult to separate the good advice from the bad advice. It takes a lot of effort to implement most of this into one's life. Sometimes you realize something you did doesn't work at all and was a waste of time (or worse detrimental to your health).

Whenever I talk about all this stuff with people I get weird looks from most. If Preston and I get to talking about this stuff people genuinely believe we've lost our collective minds. I don't know if we have or not, but I do know the proof is in the pudding (don't eat pudding by the way).

I feel great and don't suffer many of the ailments that I used to suffer with. I'm usually on a better health trajectory than the people that are looking at me with puzzled looks on their faces.

Most of the stuff I'm doing won't be found in typical literature or typical 'industry' advice. Some might say I'm not very trusting of the institutions that give us our guidance. Those people would be correct. I place very little value in 'the science' that is bought and paid for by people who stand to make money from all of this.

There is 1) paid research and 2) actual scientific research. These are two very different things. For-profit companies pay for research to prove that the products they want to sell are safe and

effective. This paid research becomes published and becomes the base for 'the science'. If they get a result they do not like from some paid research they simply cast it aside, never publish it, and reengineer the study (and do more paid research) to get the result they want. All this paid research is what is being delivered to your brain daily by companies, industry experts, and governments. This is how our entire world works. If you are buying (or using) a product from a for-profit company this is how it is deemed safe and effective for you to use.

The problem is there are plenty of things that are safer and more effective for you to use BUT they don't have a profit motive. No one can make a profit off it, therefore no 'paid research' is done. Perfectly good solutions exist if someone does real science instead of paid research. Most of these solutions are simple common-sense solutions that have worked for decades (even centuries). The only problem with them is they are not profitable enough. Complexity allows companies to deliver solutions that cost more and with increased profits (regardless of if they are better for you).

The people I listen to need to jump that hurdle for me to take them seriously. Their advice needs to 1) make sense (most things can be determined using simple common sense), 2) have some form of scientific proof, and 3) have proper incentives. It is frankly easy to determine all this after you listen to them for a while. They are usually people like me that are looking for the 'right answer' to the problems the world is presenting us. They hardly ever find that mainstream advice is the 'right answer'. There's a lesson in there!

If that makes me a skeptical, conspiracy theorist I guess it does. I'm fine with it because I feel as good as I ever have in my life. This has come from actively moving away from the advice of the mainstream in almost every area of my life.

If I'm wrong, I don't want to be right!

I probably am wrong. When I look at the picture of that cell I can't help but think what a miracle it even is that we are alive. There is so much that we don't understand. Regardless, most of the things outlined here make sense to me from a common-sense perspective. So, hopefully, they'll make my very intricate cells stronger and healthier over time. We'll see!

Stay Healthy!