

The testosterone report

How to increase your testosterone 100% naturally and according to science.

Free report, 100% content, 0% marketing hype

No drugs, shady no supplements.

The most in-depth research you will find

by Derek Moody

Table of contents

The testosterone report	1
Table of contents	2
Brief introduction	3
The usual word of caution	5
The golden rule: think for yourself	6
My story (don't worry, it's short)	7
Hormones 101	9
How testosterone is created	11
Kinds of testosterone	12
Average levels of testosterone	13
What destroys your testosterone	14
Hitting from every angle	16
What you can expect	17
Diet 1: bye bye sugar	18
Diet 2: sweep estrogens	21
Diet 3: eradicate trans-fats	23
Diet 4: eat more fat	25
Diet 5: the vitamin connection	31
Testosterone diet in a nutshell	35
Diet 6: alcohol and testosterone	39
Lifestyle 1: stress and rest	40
Lifestyle 2: move!	42
Lifestyle 3: the right kind of exercise that optimizes testosterone	43
The shocking turn of events	46
Referenced Studies	52

Brief introduction

Coming clean is important for me, so Derek Moody is a pen name and this report exists because I suffered from low testosterone and I'm sure I'm not the only one.

I searched for a solution and I went deep down into the rabbit hole, learning and researching as much as I could. In that journey I discovered a lot of things that any man should know. This is my little contribution, what's written here helped me and it will help you too.

I've researched and experimented with tons of jaw-dropping information, I'm obsessive, and I didn't stop until I reached as deeper as I could.

So, let's begin.

Do you want to boost your sexual drive, build muscle, lose fat and have more energy, motivation and concentration? Dumbest, question, ever. Of course you want, and testosterone, the "*male*" hormone, can do that.

Bold promise, I know, you can roll your eyes if you want because I'd do it too, but it's true. When I learned about this, I wondered how something so important was so unknown, especially for men.

Here you will learn how to optimize your testosterone production, 100% naturally and according to science. No magic remedies, no strange pills, no shady supplements with unknown secondary effects that I try to sell for profit.

But I don't only want to explain how, I want to explain why. As Doug McGuff says: "*if you know the why, you will embrace the how*".

Let's begin with the basics.

The testosterone Report - Derek Moody

Testosterone has had a bad reputation, being equaled to caveman, aggression and dumbness, but nothing can be further from the truth.

Think about the typical grumpy old man. He has bad temper, armpit trousers and a crappy mood. One of the main reasons for that is his low testosterone. Aging lowers testosterone, and testosterone helps to be focused and controls mood¹. Not only that, testosterone encourages us to achieve things, get the girl (or whatever you want) and tackle life goals.

And one more little thing, it's a key to sex drive and performance. So if you don't feel like when you were a teenager in that department, you bet your testosterone can be playing a role.

Father Time robs us: our hair, our muscles... and yes, our testosterone. Maybe you think it's normal and you have to accept that, but what you probably don't know is that many things in our lifestyle and environment speed that process and disrupt our hormones. And that's not cool and "*natural*", but do you know what's even less cool?

That many widespread "*healthy*" things in our modern life turbocharge that loss.

We are bombarded by "*healthy*" advice that's contributing to shrink the size of our testes.

Lower testosterone because of aging is natural, but as we will see, many men keep enough to be active and motivated to do something worthwhile, until the very last day of their lives.

And I want to be one of them. If you want too, keep reading.

The usual word of caution

You are probably a grown man, if not, you can leave this book now because there is nothing very interesting in it for you (or maybe you are a woman worried about your man and you want to help, if so, you are a keeper and please give this to him).

In my humble opinion, personal responsibility should be the banner of a real man.

I'm not a physician and I'm not going to play one. You should talk to your doctor regarding diet, exercise or supplements if you have doubts or you suffer some medical condition.

Nothing here is dangerous, untested or illegal, on the contrary, it will likely improve your overall well being, but it's impossible to know everything about everyone that reads this pages.

And sometimes low testosterone levels come from serious medical conditions, so remember, overnight miracles don't exist and you should be smart and talk to your doctor.

Now, the legal advice, sorry, I have to do it. This information is for educational purposes only. It's not intended to diagnose, treat, cure, or prevent any disease. This information is provided on an "as is" basis and the author makes no representations or warranties of any kind, express or implied, and he will not be liable for any damages of any kind arising from the use of this information, including, but not limited, to direct, indirect, incidental punitive and consequential damages.

Reading this means that you are cool with it, if not, stop. I just try to help and share what I've learned, because I was in a very dark time regarding this issue, I know I'm not alone, and I'm telling you what fixed my situation.

The golden rule: think for yourself

First of all, if you are like me, you don't like to be told what to do. Fair enough.

I'm not saying that you must follow blindly what I say here. No one is forced to do anything, the only thing that I ask from you is this: think for yourself.

Challenge what you have been led to believe, look for the references and studies I give in each chapter, and please, think and draw your own conclusions, because many times we are on cruise control and that's no way of living.

My story (don't worry, it's short)

The day it all started, I was really hangover in the front seat of a friend's car. I did not sleep the night before, partying hard with some other friends and finally getting the girl that I liked for some time. It was meant to be a night of champions but it ended being a night of shame.

Truth be told I had so much tequila in my body that Mexico called to say thanks, but my sex drive was not there for me that night and I was deeply ashamed.

In the beginning, I tried to brush it off because, you know, I had too much booze inside and I was not a teenager anymore. But I'm so obsessive that I worried, and worried, and worried a little more, so I started to join some dots.

Looking back I realized it was not only that night, my sex drive was always low. I did not remember having morning erections, or at least as hard and frequent as before. Something beyond too much shots of tequila was happening, and I started to measure my performance.

You know, as men we say we are always ready, in fact, many times I only needed an innocent hug from a girl I liked to start feeling something between the legs (yes, I had to do that ridiculous maneuver of moving back my hips a little, but I know that you know what I'm talking about). Now that was gone and my hardness was nothing to brag about. I could perform when needed but I realized that I was far from being Wolverine.

Besides that, I was more apathetic than ever. Unmotivated, always in a crappy mood and I could not focus in anything. I blamed my job, but that was not that main issue. My passion, in every sense, was gone, and that's no way to live.

The testosterone Report - Derek Moody

I knew that hormones tend to call it quits when you age, but come on, in your mid-thirties and when you are healthy and fit? And so fast? No way that was natural.

And even if it was, I wouldn't go down without a fight. As my mixed martial arts instructor says: *"no free shots, if you get hit, make them pay for it"*.

It's a shame that we only wake up when we really hit rock bottom, but I tried to learn all that I could about testosterone. I devoured tons of information, reading really bizarre scientific studies that, believe me, bore me to tears most of the time. But I discovered some facts that gave me millions (and millions) of *"a-ha"* moments. In fact, I learnt about things that years after years, I've still not seen in other books about testosterone.

Many times I thought: *"everybody should know this, how can it be so important and so unknown?"*

And because of that you are reading this.

Hormones 101

Ok, every study and every text that I've researched about this topic is boring and dry as hell, but I will try to explain everything in layman terms, even if it means to sacrifice a little bit of academic accuracy.

Hormones are crucial for our well being, but they are total unknowns to the general public. We talk about calories, cholesterol and the like, but hormones don't get much publicity, which is a shame, because they are much more important than other things we worry about constantly.

There are lots of hormones, but testosterone, insulin, cortisol and estrogens are the main ones that we are going to see here. They have a role in our bodies and the thing is: **when a healthy balance between them is altered, they wreak havoc.**

Our bodies generate hormones for every reason under the sun: you need to put up with your insufferable boss and his shenanigans, so your body generates cortisol. You have just eaten a gigantic ice cream, so insulin is needed to take care of the sugar in your blood, or you will finally have sex with that gorgeous person, so you hope your testosterone is right.

The thing is, our body is an amazing machine that adapts very well, and it can endure much of the abuse that we put it through, but our habits, age, some environmental conditions and our lifestyle alter our hormone production.

And this is one of the keys: in general, **if our body needs to create too much of one kind of hormone, then it tends to "sacrifice" another.**

Imagine a factory with limited resources. If you need to create lots of insulin for some reason, you tend to shut down other hormones, because our body is amazing but not almighty. So for our purposes, testosterone gets shut down if we need to release too much of the other hormones we will talk about.

The testosterone Report - Derek Moody

And because you are smart, you start to see that if you want more testosterone, you will have to check your cortisol, insulin and estrogen levels.

Before we get to that, we need to explain a little bit about what is testosterone and how it is created.

How testosterone is created

We need testosterone because we are men and we need to do our manly things, so our hypothalamus (that's a part of our brain, not the funny animal) releases a substance to the pituitary gland called gonadotropin-releasing hormone (GnRH from now on).

This hormone causes the gland to produce two other hormones: follicle-stimulating hormone (FSH) and luteinizing hormone (LH), also known as gonadotropins.

The LH travels to our testicles to remember them that they have to do something more than hang in there, so it triggers the production of testosterone (about 95% of testosterone is made in the testes, the other 5% is made in our adrenal glands). Because our testicles can not make testosterone out of thin air, they need to create it using something.

That something is cholesterol.

Am I implying that the "*public enemy number one*" is what we need to make testosterone? I'm not implying anything, I'm totally saying it.

And not only that, **cholesterol is a substance so important that it's needed for almost everything.**

If this process continues and testosterone levels become too high, the pituitary gland slows the release of LH, so production slows down. FSH (the other hormone released by the pituitary gland) is similarly involved in the increase and decrease of sperm production.

Kinds of testosterone

If you get tested and you get a high number of total testosterone, don't deliver high fives and show the paper to the ladies yet, that tends to be good, but it's not the important number.

In our bodies we have something called Sex Hormone Binding Globulin (SHBG) that binds to testosterone, leaving less "*free testosterone*". The free testosterone is what is available for "*androgenic use*" (i.e. our manly things).

What this means is that high total testosterone is important, but not the main amount that interest us, free testosterone is, because it's what we can really use for our purposes. Using another fancy word, that's the bioavailable testosterone (free testosterone plus albumine-bound testosterone that can be easily reverted and freed).

Average levels of testosterone

Ok, so how much testosterone is “normal”?

As you age testosterone varies a lot, in fact, as the day goes by, testosterone varies a lot. In the morning the number is higher, so it’s important that, if you are going to get tested (basic recommendation if you are worried about your testosterone), do it at similar times of the day.

Testosterone tends to be measured in ng/dl. That means “nanograms per decilitre”, a nanogram being 1/1,000,000,000 grams.

Between 250 ng/dl and 850 ng/dl can be considered “normal”, but according Vermeulen², that made a study of the average testosterone and free testosterone in men, your average numbers can be like this:

25-34 years: 617 ng/dl total. 12.3 free.

35-44 years: 668 ng/dl total. 10.3 free.

45-54 years: 606 ng/dl total. 9.1 free.

55-64 years: 562 ng/dl total. 8.3 free.

55-74 years: 524 ng/dl total. 6.9 free.

75-84 years: 471 ng/dl total. 6.0 free.

85-100 years: 376 ng/dl total. 5.4 free.

The deviation being between 170 and 213 more or less.

What destroys your testosterone

Life is good and you start with your precious hormone balance and your healthy levels of testosterone. Then you become a teenager and your body releases more testosterone that you can handle, but you know that when you finally become a grown man, something has to come and screw everything.

Basically everything that damages the circuit involved in testosterone creation (which I previously explained while you were sleeping) can trigger deficiencies.

For example, damage involving the pituitary gland, hypothalamus (try to remember these two terms, you will know why later), or testicles (bad surgery can do it or that kick in the balls that everyone found so funny), glandular malformations, infections, tumors, chemotherapy or radiation therapy...

Those are the most extreme causes, but there are others, and they are more common:

We know aging is a cause, but obesity³ is too, and diabetes⁴ or hypertension⁵ can play an important role also (and obviously not a good one). Those studies referenced in the footnotes are just a sample, there are many more.

As you can see, our low testosterone **can be a product of our lifestyle**, but wait, there are more threats.

One of them is xenoestrogens, another fancy word to describe estrogens (*"female"* hormones) that are external (not produced by our bodies) and artificial. Those xenoestrogens come from industrially made compounds that we use for many things in our daily lives. From deodorants to insecticides to plastics... We are bombarding ourselves with strange xenoestrogens that come to the party like uninvited aliens and, little by little, disrupt our precious hormonal balance.

The testosterone Report - Derek Moody

We don't know yet all the consequences or its extent, because it's mostly uncharted territory, but you bet it's not going to be pretty, and every minute we are less men than our ancestors.

Another critical factor is diet. As we will see, diet plays a key role, not only because unbalanced diets can provoke the obesity, hypertension, etc, but because **food has a profound effect in hormones too**. In fact, as we will see, many "*healthy*" recommendations lower our testosterone production and boost our estrogens.

If we go further, stress and bad sleep put a stranglehold to our testosterone too, so yes, testosterone is surrounded by enemies and circling the wagons.

But it's time to fight back, right now.

Hitting from every angle

Because many things influence testosterone, we can not even point fingers. Usually, low testosterone is a sum of subtle causes. **In order to counter that, our fight must be global.** It has to be a way of life, that way, the results will be sustainable in the long term.

In order to optimize those results we must hit back in many levels (physical and mental).

We can't control everything in our life, but there are two things that we can for sure:

+ Diet.

+ Lifestyle.

Diet is really a part of our lifestyle, but it's so important by itself that it deserves special attention. Diet has profound effects in hormones, as it has been demonstrated countless times, so that will be one of our main weapons.

We are going to introduce changes in those components and we will outline, in easy steps, what worked best for me (and for many others according to the scientific studies we are going to see).

What you can expect

This is not an overnight miracle and I can not guarantee anything, I'd love to, but I can't.

Personally I started to see the best results (and I mean the BEST) in about two months, maybe a little less. That's when the influence of an unexpected factor (later, we will see what it was) started to wind down. Before that, I saw good results in a few weeks.

The thing is, if you want to track tangible results, please get tested before and after, there is no other way.

Maybe you are lazy or maybe you won't get the tests for some reason, that's okay, you will feel if it's working tracking your morning woods, if your hustle returns and if you feel motivated and strong in front of things that seemed impossible before.

Diet 1: bye bye sugar

Ok, let's start the practical actions with the most important thing: diet. It has tremendous influence in our hormones, and the first step to an optimal testosterone diet is:

Kick sugar to the curb.

In fact the thing is: cut the **excessive amount of sugar you are probably ingesting**. That means pasta, pizza, bread, cereals, sweets, ice cream, desserts...

If you live in a western country, chances are that you are taking too much carbohydrates, especially industrially made food loaded with tons (and tons) of sugar.

When we ingest sugar, our insulin rises. More sugar = more insulin and if insulin is high, testosterone is low⁶, and that happens even when you are a twenty-something.

In the 91st Annual Meeting of the Endocrine Society in Washington, D.C. they concluded that, no matter how healthy you are, ingesting sugar decreases testosterone... hard. We are talking about 25%, that's worse than adding 20 years to your age.

How is that possible?

Remember that our bodies are like factories with limited resources? If they need a lot of some kind of hormone, they tend to shut down others. Others being testosterone.

When you eat that "*Chocolate Triple Threat*" dessert there is a ton of sugar running around, and your body needs to cope with it before you become blind or something. The pancreas releases insulin to manage that and it becomes a priority.

The testosterone Report - Derek Moody

If you are a professional athlete and you just completed several hours of strenuous training, your body will use the sugar to restore glycogen in the muscles (and liver). In every other situation (99% of the situations for us, mere mortals) your reservoirs of glycogen are full (because, let's face it, you don't burn too much energy playing *Call of Duty*) so our body can't process all that sugar that you eat and the command is: ***“ok, let's store it as fat”***.

Yes, unused sugar is stored as fat, so join the dots. You can eat those silly *“low fat”* foods that taste like cardboard and you store fat in a worse way that if you eat some pork ribs. Why is that? Because, basically, when you trigger insulin your body enters in a *“store fat”* phase, so you won't burn those love handles.

Icing the cake, the hormones that burn fat are insulin sensitive, so when there is insulin wandering the streets our *“fat burning”* hormones are not active. And yes, they don't tell you that part when they sell you that awful *“low fat”* food.

But regarding the main topic here, the thing is that if your body needs to release tons of insulin all the time, testosterone fades into the background. On the other hand, if you keep your insulin in check, not indulging in sweets and carbs **all the time**, your testosterone (and your fat loss efforts) won't suffer that much.

Now, don't get me wrong, I'm not advocating a low carb diet. Insulin spikes are a natural process, so now and then they are more than fine. But if we take a look at how we are eating nowadays this is a bigger problem than we think. We eat sugar constantly. In time, with too much sugar, you can develop insulin resistance, a condition where so much insulin has been released (due to constant ingestion of sugar and carbs) that the hormone become useless and it can not do its job anymore. That happens in the same way that when you use anything too much, their effects disappear in time. As you can imagine insulin resistance is related with low testosterone⁷.

The testosterone Report - Derek Moody

The next step can be diabetes, and we saw in the beginning how bad it is for testosterone (and life, in general).

We are bombarded with messages about how “*healthy diet*” means eating carbs and cutting fat... looking at how obesity and diabetes run rampant today, something is really wrong here... And we become emasculated in the process.

Cutting sugar (which is likely addictive⁸) and other carbs can be hard, especially if they are the cornerstone of your diet. I’m not saying that you become necessarily a “carb hater”, but some foods should be banned right now. I’m talking about every industrial snack or cake, and everything made with refined flour. The first rule of thumb is that: *if food comes in a bag or a box it’s an usual suspect.*

Say goodbye to Doritos, donuts, chips, cakes, sugar loaded cereals, chocolates, snacks, cupcakes... Those foods create insulin spikes that will tear a hole in your roof.

That’s the first step, next maybe you will want to know more and restrict grains, bread, pasta, etc. But that’s up to you if you want to go deeper into the rabbit hole, for now, **don’t spike your insulin constantly.**

Every food has what’s called Glycemic Index (GI), a high Glycemic index means that, when we eat that food, our insulin will come to the dance floor, (elbowing testosterone and other fat burning hormones in the process). A value of 100 is assigned to sugar, and other foods are classified accordingly.

You can search the GI of foods on the web and try to keep them low in the diet, GI it’s not the be all and end all, but it’s a good starting point.

Diet 2: sweep estrogens

Estrogen is the “female” hormone, and we, males, have it too. In fact estrogens are needed by some of our brain functions. Males create estrogens from the testosterone using the enzyme aromatase.

But we create only a little, so the ratio testosterone / estrogens is about 50:1 in males. If we have a lower ratio (meaning more estrogen) we don't “*feel that good*”.

Ok, get this, estrogens are not the bad guys, almost nothing here is bad because **everything has a role**. What we want is a **good balance**, so we are going to make sure that we keep that balance and check our estrogen levels. We must have the minimum needed (but no more) and they must be the nice kind of estrogens.

Our two weapons for that are going to be **broccoli and zinc**.

I know, you are a grown man and probably you became an adult only to escape from broccoli, and now I'm telling you to go back to it?

Well, yeah, if you want to keep being that grown man.

Or you can try cabbage, Brussels sprouts or cauliflower, in my opinion they smell even worse.

The thing is that cruciferous vegetables (like broccoli) are rich in indole-3-carbinol (I3C), a phyto-chemical known to turn “*bad*” estrogens (which shut down our testosterone production) into good ones. Eating them helps to restore testosterone production, improving the hormone balance⁹.

In studies, “*bad estrogens*” were cut in half when seven healthy men took 500 milligrams of I3C a day for a week. So if we are surrounded by estrogens and xenoestrogens we can fight back and swing for the fences with a broccoli in our hand. Not the most epic image, but it works.

The testosterone Report - Derek Moody

Cruciferous vegetables are so ridiculously healthy that you know life has a sarcastic sense of humor; it puts the better things next to the worse flavors (and viceversa). Oh, and they are rich in zinc too (the other anti-estrogen weapon), so we kill two birds with a stone.

You can take a look to every cruciferous vegetable in Internet, my main choice is Arugula or Rocket (as the British say), it's a very common vegetable where I live (Mediterranean shores) and it's used a lot in salads (arugula, olive oil, cherry tomatoes or even strawberries with balsamic vinegar and it tastes like heaven). I consume broccoli too (i never did when I was a child, cauliflower was the main torture), I do it raw, sliced in tiny pieces and mixed with scrambled eggs for example, it's not that bad.

Choose the cruciferous vegetables that you like and start buying them again (and eat them too, they do nothing staring at the milk in the fridge until they rot), try to mix them with other foods if you can not stand them.

The other ally we have in this battle is zinc.

Zinc inhibits aromatase, the enzyme that converts testosterone into estrogens, so a rich zinc diet will keep estrogens in check, while a zinc deficient diet can plummet your testosterone levels¹⁰.

Zinc is a "*manly*" component, so we must get plenty of it in our diet. That means: meat, oysters, seafood, peanuts and dark chocolate (yes, chocolate is good, but take it as dark and pure as you can, not diluted with sugar, milk and trans-fats...).

You can take zinc in supplements too, because many diets can be zinc deficient, fortunately zinc is cheap, but, and it's a very big but, **don't overdose**. As always, balance is key, so don't eat zinc pills as candy, always follow medical guidance when taking some supplement.

Diet 3: eradicate trans-fats

In the next section we will start with the more “*controversial*” point (controversial because we have been brainwashed so much that we will probably freak out). In the meantime, another diet change that we must adopt is to eliminate, completely, trans-fats, also known as partial hydrogenated fats.

Do you remember when I said that almost nothing here is bad “*per se*”. Well, trans-fats are pure evil, so **0% is the recommended dosage.**

In recent years this has been a widespread recommendation so we won’t have much trouble avoiding them, but many things still have them in their ingredients.

For those who don’t know what trans-fats are, they are made by a chemical process called partial hydrogenation.

Liquid vegetable oil does not look good when added to some foods (imagine your cookies wet and dripping some awful plant oil when you open the box), so the food industry started to pack hydrogen with it. It seemed like a good idea because vegetable oils become a solid fat (think of “*butter-like*” fat). The food manufacturers rejoiced because it can be used as margarine, for example, or in a lot of industrial foods because it’s creamy; it melts at a high point, it has smooth texture... That way the cookies become tasty again and deliciously greasy, without dripping.

For some reason we came to think that vegetable = healthy every time (big mistake, by the way) and there were times where margarine was “*healthy*” because it came from vegetables (and a nice industrial process involving hydrogen, but that’s only a little detail that seemed insignificant). Meanwhile, good old butter was “*bad*” because it came from an animal, but here is the thing, trans-fats are really

The testosterone Report - Derek Moody

awful, being related to cancer¹¹, high blood pressure and even some hydrogenated vegetable oils have been found to directly decrease testosterone¹².

Trans-fats are a strange modern creation and our bodies are not prepared to deal with them very well, messing around with everything. Research a little bit and you will see.

Rule number one to start avoiding them: **eliminate fast food for good**. Rule number two: **read the labels**.

You can find trans fats in pastries and cakes, french fries (depending on the oil), donuts, cookies / biscuits, margarine, fried chicken, crackers, potato chips, and lots of industrial food.

If you followed the first recommendation and tossed out what comes in a box or a bag you are relatively safe (you will have to be smart when eating out, especially when eating at fast food restaurants), but look for the words hydrogenated, or partial hydrogenated, in the labels. If you see them, slowly leave the product in the shelf and back away.

In time I suppose they will disappear, but I would not hold my breath.

Diet 4: eat more fat

If we want to optimize testosterone we need a high fat diet.

I know, I know, fat and cholesterol are the enemies of humanity, at least it's what they tell us every day in the news. Fat will make us fat and our arteries will be clogged by cholesterol... Two of the most misguided dietary tips, ever.

The discussion can be endless about this, we are so bombarded with slogans against cholesterol and low fat products that it's ridiculous, and if you don't go with the flow you are dubbed an idiot by society, you will die tomorrow killed by your buddy "*the fat*" and maybe you will be charged with sedition, if you survive long enough.

But as we know too, obesity and diabetes are king and queen nowadays, even when we try to cut fat to zero, so maybe it's not so clear after all...

This is not a paper about weight loss, so I won't even try because I'd had to write several volumes, this is about optimizing testosterone. Scientific study after scientific study confirm that **high fat diets correlate with higher levels of testosterone.**

I reference only some of them.

In a 2005 study¹³, 39 healthy men between 50 and 60 years were studied while they were consuming their usual high fat, low fiber diet. After 8 weeks they changed to a low fat, high fiber diet (keeping the same amount of calories). The results of the dietary change were a reduction in total testosterone, free testosterone and some of the T-precursors (12% consistent lowering of circulating androgens levels without changing the clearance).

Another study¹⁴ with 30 healthy male volunteers. They had a diet which supplied 40% of energy as fat (mainly from animal sources) and was replaced, for a

The testosterone Report - Derek Moody

6 weeks period, by a lower fat diet (25% of energy came from fats) with same calories and other environmental factors stabilized. Results? 15% drop in total testosterone with corresponding drops in free T and androstenedione.

One more¹⁵ where they studied Testosterone, resistance training (another critical component as we will see) and diet. They concluded, not only that diet influences T levels, but fat and testosterone were positively correlated.

And here comes another¹⁶. They put men on a high-fat diet (about 50% of calories from fat) for 2 weeks. After that, they switched to a low-fat diet (more or less 10% percent fat) for 2 weeks too. Their free testosterone (remember, the precious T that we want) dropped 21% on the low-fat diet.

And I'm going to stop because this is getting boring.

Bottom line is: step one: eat sugar, carbs, fiber and go low fat, step two: wave goodbye to your testosterone, energy and youth. Step three: congratulations, now you are "*healthy*" (and yes, that was sarcasm).

I can see you, you are gathering wood in the town square to burn me, because not only I want you to die from heart disease before your 40th birthday, but you are afraid you will grow a big gut and screw your efforts to get fit (a condition that, as we saw, is key to testosterone).

Well, remember the golden rule here: think for yourself. If something works for you, please keep doing it and, above all, do what you want. I'm just sharing what I've learned, and above all, what I've lived. This was my own experience:

1) I failed miserably in all my goals (testosterone included) when I got into a low fat - eat sugar lifestyle.

Not only I was stuck with artificial food that tasted like paper, but I had the lowest energy levels of my life and a less than manly body, I was one of those "*skinny fat*" guys. I seemed skinny on the outside but my muscles were nothing to

The testosterone Report - Derek Moody

write home (even when I trained). If you grabbed my gut you could pinch a good bunch of stubborn fat that refused to leave since I was a teenager.

Many people eat less, eat low fat and rise a crucifix when they see things like meat or whole milk, yet they never get their desired bodies or health.

2) I had the epiphany that hormones play a key role in getting fat (and depressed, depleted of energy, etc.) **or getting ripped** (and focused, energized and happy).

In fact, it's quite possible that we get much better results optimizing hormones than counting calories. Hormones rule almost everything.

The thing is: *"Eat fat and you will get fat"* is one of the most misguided and awful diet advices ever.

Eat fat with sugar and you are trapped in your worst nightmare, because your insulin rises and the body follows the *"store fat"* command. Meanwhile your testosterone (a *"fat burning - muscle building"* hormone) and other fat burning hormones plummet. So the sugar gets stored as fat, the fat gets stored as fat, and previous fat won't move from its warm place in your love handles because, obviously, it's not needed.

See how good is the burger (protein+fat) + chips (carbs+awful fat) + soda (worst kind of sugar) combo? You can not get hit harder.

But if insulin release is controlled, lowering the insane amount of carbs we ingest nowadays (I don't think we are made to eat so much sugar, which is a relatively "modern" invention in human evolution, when agricultural societies appeared) and testosterone is high, guess what? Our body is in *"fat burn - build muscle"* mode. If you combine that with an active lifestyle, you will burn fat, packing muscle in the process **IF** you do resistance training.

The testosterone Report - Derek Moody

I trashed every industrial food loaded with sugar, started to buy and cook real natural food, like fresh meat, fish, tons of veggies, some nuts, etc. lowered my carbs and grains, started to get more energy from fat (to compensate the carbs and calories cut) and my body literally changed.

Not only I could see my abs for the first time in my life (nothing fancy, but I didn't even try) but an ex-girlfriend of mine that came to visit commented, out of the blue, how my body had "*changed*" (prior to that, she saw me a month ago) and not only because I packed a little bit more muscle (I increased my resistance training, because it's another necessary piece of the puzzle as we will see), but because my entire physiognomy changed. I weighted the same and I was still thin to the eye, but I seemed "*more masculine*" in her own words. She could not pinpoint one thing, but I was different.

Oh, and my energy levels? **Through the roof.**

In my mid thirties I have more than ever and, for example, I can see how I'm climbing the ladder in my mixed martial arts training, where I'm faring better than ever in the "cardio" department (of course that's because I combine diet **AND** training).

The diet issue is much more complex than this, but if you are interested in knowing more, read the studies referenced here, research for yourself a little bit and challenge what you think.

A good starting point is searching for Gary Taubes. Their books are not easy to digest (childish pun intended) but, believe me, they are worthy. Maybe it will change how you think and what you know, you will get more results and probably you will want to shoot your TV, every time a food is advertised.

More fat in your diet doesn't mean any kind of fat. This starts with a rule of thumb: **don't eat anything fried or (obviously) deep fried.**

The testosterone Report - Derek Moody

They tend to use vegetable oils, which become really bad¹⁷ (i.e. Toxic) for us when heated. And take a look at this example: potatoes are a carb source and when you fry them you are getting a trifecta of sugar + fat + toxic substances that will kick testosterone between the legs, and if you bread that fried chicken you are having a similar effect. Remember that lots of carbs + fat is a bad combo, better if you don't add toxicity to the mix with deep frying.

One of the things I've discovered in my research is that the type of fat that increases testosterone is a complex issue. These are the main kinds of fat (in one "fatty" food you can find several, or all of them, in different ratios).

+ **Saturated fats** are those mainly found in meat, some fish (like salmon) and dairy products, i.e. Animal sources.

+ **Monounsaturated fat** is found in vegetables and animals: olive oil, avocado, nuts, some fish...

+ **Polyunsaturated fat** is found mainly in vegetable sources: soybean, sunflower, corn and their oils.

The thing is that although several studies had seen a positive correlation between fats and testosterone levels, one of them found that fat ratio can play a role¹⁸.

This study concluded that when Polyunsaturated fats (PUFA, the "vegetable" kind) were more abundant than mono and saturated (SFA), there was a **negative correlation with Testosterone**. I quote.

"Our results showed a nonsignificant correlation between PUFA and T and a significant negative correlation between the PUFA/SFA ratio and T."

So it seems that best results are accomplished **when saturated fats are the main source in the high fat diet**.

This means: meat, fish, eggs...

The testosterone Report - Derek Moody

Yes, they are telling us that bacon and ribs are going to make us fat and ultimately kill us, but not only they won't (if we don't eat only that) **they are the main dietary key to testosterone.**

Diet 5: the vitamin connection

Next stop in our testosterone journey: vitamins. They have a powerful role in our hormone production so if we are deficient in these vitamins our testosterone will suffer, BUT, as it happens with almost everything, an excessive amount will have awful effects too. So, for the benefit of those who don't listen very much I'll say it once again, **get tested, consult a physician and don't get overboard.**

If you read that vitamin A has a positive testosterone effect don't load yourself with tons of it because you will mess with the very problem you want to solve, besides other very nasty effects.

Balance is the key in every step so, with that being said, these are the vitamins that we must take care of:

Vitamin A

We start here because, you know, it's the first letter. Scientific studies have shown that if you don't have enough of this vitamin your testosterone will decrease and, after that, your accessory sex organs will atrophy¹⁹. Raise hands if you want that; no one? Good, I thought so.

Another study saw significant correlation between testosterone glucuronide and vitamin A²⁰ (and by the way, the same study saw correlation between fat intake and testosterone, another one that says the same...)

Bottom line. Our diets must secure enough quantity of this vitamin.

Best food for that?

Whole milk, eggs, liver, dairy products like butter... Old school bodybuilders used them as the backbone of their diets, and they were right because the vitamins, cholesterol and animal fats made them natural anabolic foods.

The testosterone Report - Derek Moody

Bad news: if you are fully into the low fat nonsense you are cutting lots of vitamin A.

I personally reverted to whole milk and I must confess that I'm a addicted to cheese.

Vitamin D

This is the other "big one".

Did you know that we create vitamin D with sunlight? Our bodies can convert the "*dreaded*" cholesterol into vitamin D if you put your mug out of the shadows.

And do you know when testosterone levels are higher in men? Summer (that was easy) and not only because there are less clothes around, but because vitamin D is higher in the summer too, due to increased exposition to sunlight.

Vitamin D is indeed a hormone, and, for example, it's responsible for better athletic performance²¹. Besides that, it directly affects the Leydig cells, that live in our testicles and are responsible of our testosterone production.

Deficiencies in Vitamin D showed decreased testicular functions, that were improved after 1 month when normal levels of vitamin D were reached again, but get this: too much vitamin D showed testicular disfunction too²².

Vitamin D is almost a super substance, but for our humble purpose here, take a look at the studies and you will see that, when you have enough vitamin D you will have higher levels of testosterone than those with deficiencies.²³

I'm lucky to live in a country where sun is shining most of the time, but today they say the sun is our enemy (mainly because we are messing with the protective capabilities of our atmosphere) and, in general, our lifestyle locks us in cubicles from dawn until dusk. The thing is, if you see sun, run outside and rejoice (but beware of burning yourself).

The testosterone Report - Derek Moody

Bad news here, regarding diet, very few foods contain naturally vitamin D: fatty fish such as salmon, tuna, mackerel and fish liver oils are the best sources. Small amounts of vitamin D are found in beef liver, cheese, and egg yolks.

With few sunlight and few foods we tend to have low vitamin D levels, but if you start to get your diet right you are on the correct track. Besides that, we have a powerful cheap thing that will help us.

Cod liver oil.

It has so much vitamin A and D that it's ridiculous. The taste is so horrible that you will find it in gel capsules, so you can swallow it.

One of those capsules (415mg of cod liver oil) gives you 47% of daily recommended intake of vitamin A and 68% of vitamin D. Personally I take a capsule or two daily, but remember, get tested, don't go overboard, etc. I'm not you. Of course those fats in the cod liver oil help our cause too.

Vitamin K

This a is an almost unknown letter when talking about vitamins, but when you are bleeding and you need to stop it, your bones are not what they used to, or your skin starts to turn inelastic and old, vitamin K is playing a role there. Better said, depletion of vitamin K is playing a role, mainly because of aging.

When vitamin K leaves the station, our dear testosterone loves her so much that she runs after the train and you can't find her until normal levels of vitamin K are restored.²⁴

We can't make vitamin K, so we must take it from food. What food? Don't worry, you won't grow a biblical grocery list nor you will have to remember a lot of strange names. Green leafy vegetables are the main sources, and you should have them as a cornerstone of your testosterone diet, so you are covered, especially if you took seriously the cruciferous vegetables part. Kale, Brussels sprouts, spinach,

The testosterone Report - Derek Moody

collards, turnips, lettuce... if you see something green, chances are vitamin K is present.

Parsley (über present in Mediterranean cuisine) is so loaded with vitamin K that two tablespoons contain 153% of the recommended daily intake... and it will help with our bad breath too.

Garlic

What? Garlic is a vitamin? Nope, but these are my pages, and I could not find a better section to put it.

Garlic has been shown to increase testosterone levels in testicles and decrease cortisol levels²⁵ (two birds with one piece of garlic) at least with a high protein diet, a kind of diet that you will probably have when, along with tons of veggies, you will eat your eggs, meat, fish and dairy.

Garlic is so healthy that there are supplements that contain allicin (its main healthy component). If you can't stand the taste (i love it when it's used to cook) or if it's not easy on your stomach (too much for me is not a good thing) follow that way. My philosophy tends to be *"eat the food instead of the strange pill"*, but sometimes capsules (like in cod liver oil) are not so bad.

Testosterone diet in a nutshell

When I started to worry about diet and nutrition years ago I found everything confusing and contradictory (and very misleading in some critical issues). Luckily, the necessary changes to optimize testosterone are easy as pie, so knowing what to eat is not complicated and won't interfere other dietary goals you can have (like staying fit and healthy), on the contrary.

Best of all, you won't be counting calories or making lists of strange allowed foods, it's a lifestyle full of rich natural meals and delicious things, once you start with it you won't have to worry.

Let's sum everything.

1.- Go easy on sugar and carbs to avoid constant insulin spikes. Refined flours and every industrial snack are out of the table. Remember, if it comes in a bag or a box is not a good sign.

2.- Avoid fast food, anything deep fried and trans fats like the plague until they disappear forever.

3.- Tons of veggies must be present in your shopping cart and in every meal, in order to add substances and vitamins that we need for our goal.

Cruciferous (like broccoli) and green leafy vegetables are a must, so no excuses if you want to see results.

Make salads (with olive oil), steam them, eat them raw... pick your preferred weapon but **have veggies every time you eat**. This is very important.

You can not go wrong with veggies (soy being the exception, it's a very estrogenic food, so it's out).

The testosterone Report - Derek Moody

They will give you critical vitamins, antioxidants and substances so healthy that you will want to kiss them before you eat them... and they will give you carbs too, but they won't spike your insulin (their glycemic index is very low) and you can not possibly ingest too many carbs from veggies.

4.- Eat meat, fish and eggs. If you cut carbs you can eat some fatty meats or fish (like yummy smoked salmon). You will raise your testosterone and get thin in the process, really.

We need energy and if we don't take it from carbs we will take it from fat, and because more saturated fat will improve testosterone, you will be a "*fat-burning, muscle-building*" machine, instead of getting fat and depressed because you don't even eat real food and you crave sugar constantly.

5.- Milk (whole), butter, nuts, other dairy products and olive oil (virgin) will help to our cause of high fats and needed vitamins, but don't go overboard here, I think common sense is the approach and you won't eat sticks of butter as you main dish right?

Right?

Ok. I thought so.

If milk is not easy on your stomach, lactose plays a role. Look for lactose-free milk.

6.- Everything is better when grass-fed (well, fish... I don't think so), but if you can not afford it, don't sweat it too much, you will be better with non grass-fed than with refined carbs.

7.- Olive oil (virgin) is the exception, but better if you **don't use vegetable oils** in order to maintain the optimal Polyunsaturated / saturated ratio.

Especially **don't heat the oil.**

The testosterone Report - Derek Moody

8.- Garlic will help, use it to cook. My brother used to eat it raw years ago when he read something about how healthy it was. It is healthy and I could smell my brother from miles away. Pointing my nose in the right direction I knew beforehand when he was coming to visit.

9.- Fruit is ok but don't go "all fruit all the time", that will make no good, because, in the end, it is sugar with water (and yes, vitamins and antioxidants, that's because fruit is ok and sweets are not). It depends very much on the fruit, but berries must be your preferred choice, if it's season, eat as much as you want.

10.- Cod liver oil is good, and maybe you will need to supplement with zinc if necessary. But, be careful, if you feel cod liver oil thinnens your blood too much, don't take it.

11.- Alcohol is as out as you can, especially beer, and especially binge drinking. We are going to talk about that, but You can slash your veins now if you want.

12.- Cheat once a week or once in a while (but try your best with excessive drinking). You know, life is there to enjoy it. A friend's mother bakes a chocolate cake that must be what they serve in heaven and it will not kill me, on the contrary. If you are on holidays with your family or it's your birthday, my opinion is "*don't be a diet fundamentalist*" (and a downer).

You will eat healthy most of the time, so **you can afford cheating, you deserve it and it won't mess with you** because it will be the exception. But remember, make it really an exception. Besides that, binging every once in a while in sugar and fast food can be even good for you hormones.

If you take a look you will see a diet that has it all (but grains) as the main components, and everything is natural, not coming from a box with a trillion of conservatives. It's real natural food, in fact it is what hunter-gatherers or ancient cavemen and warriors ate. And it's no coincidence again that, if we want to be like

The testosterone Report - Derek Moody

testosterone-driven warriors hunters, we must eat like them, and leave donuts out of the equation.

Diet 6: alcohol and testosterone

Ok, you were expecting it, and probably it's going to be painful for you, so I'll make it as short as I can. If you are a man, alcohol is probably one of your best buddies, but our jealous testosterone does not like it as much as we do.

Too much alcohol means low testosterone and elevated cortisol²⁶, that's a fact, so we are not lucky. **Binge drinking or chronic drinking must be gone for good.**

But there are some studies that saw an increase of testosterone with LOW doses of alcohol²⁷, I highlighted the low part because we, men, have problems sizing things. Low does not mean "*only one*" bottle of Jack Daniels.

So maybe you are thinking it's not so painful, that it's even good and let's celebrate in a bar, because moderate drinking does not seem so bad, but here is the worst part.

Beer should be out, probably it won't, but it should.

I can see you looking for your gun, but don't kill the messenger. Hops, the main ingredient in beer, is a highly estrogenic food.

So beer is alcohol, what means sugar, what means insulin, and hops are added to the equation, what means estrogens... not a good combo for us.

Maybe it's time to change to red wine, but don't sweat it, I have a beer every once in a while and it's all good.

Ok, I said it was going to be short, and, as always, do what you want.

Lifestyle 1: stress and rest

Do you remember another friend of us called cortisol? Of course you remember, it appeared in the alcohol section.

When we are stressed, our body releases this hormone in order to cope with hard times. Cortisol is made in the adrenal glands (where some of testosterone is made too).

When cortisol rises due to a stressful situation, testosterone lowers, and when the situation returns to normal our hormone levels do the same thing.

Our body is really wise, if we are running from that predator, or getting ready for battle, chances are we are not very worried (for some nanoseconds at least) about sleeping with our neighbor's daughter.

When we climb the tree and the lion gets bored, or we get back victorious from the battlefield, cortisol leaves the spotlight and here comes our beloved testosterone again. Our body knows it's time to return to normalcy because the neighbor's daughter was impressed by our physical prowess.

But you know how modern life is, lions don't interrupt us so frequently any more when we are sitting in the throne every morning... But our jobs suck, our bosses are dumb, other drivers are idiots, we are bombarded (i.e. Brainwashed) by depressing "*information*", the economy is a bitch and we live in a hurry.

Constantly.

We are conquering more physical maladies than ever, but mental illnesses are our new insufferable roommates.

Everyone is stressed all the time, and what does it means?

The testosterone Report - Derek Moody

Cortisol levels are up **chronically**, what means that testosterone levels are down when we are stressed or mentally drained.

So our new task is lowering cortisol. **And it means to RELAX.**

To do that, the first thing we need to do **is getting enough sleep**. This is critical to our testosterone, because **it's mainly made at night**, so better if we don't mess with that in order to keep our morning glories.

If you suffer some sleep deprivation, the next evening your cortisol levels will rise²⁸, this means that other parts of your body will have more problems to do the same. Levels can increase between 37% (partial sleep deprivation) and 45% (total deprivation).

Lowering stress is easier said than done, I know, but practicing our favorite sport, having hobbies, a life beyond our job, meditation, yoga or whatever works for you has to be done.

For me it's physical activity, meditating, making sure I go out and chat with other human beings... Keep your mind occupied with things that you enjoy, make a list of what's cool for you and start doing more of that.

And by the way, an *"information diet"* is one of the best decisions I've made in my life. I turned off news and TV years ago, I rarely read papers now (if something important happens you will know, believe me) and when I read them it's because I want to know what movies are playing downtown...

If we are stressed every day, maybe it's time for a change NOW, because I don't know about you, but last time I checked I had only one life...

Lifestyle 2: move!

If we want healthy testosterone levels we must lose weight if we have too much, we have to stay fit and even pack some muscle.

I think this is not a surprise right?

Again, if we want to be like fierce warriors-hunters, with healthy testosterone levels, we must look like one. And the best way to look like a warrior is, oh surprise, **being like one**. (Shocking, I know).

That means adopting their lifestyles. And the lifestyle of a warrior does not include staring at your computer all day with one hand in a bag of Doritos and the other... well, wherever you put it when you are surfing the web.

A warrior has an active life, a warrior stays fit and ready for battle.

If we are too skinny or we can draw the world map in our bellies, chances are that our testosterone levels are low²⁹.

Staying in your weight and some types of training and exercise will boost your testosterone. Meanwhile, eating the wrong foods and staying trapped in the sofa emasculate us. The first thing we have to know is that we need to get fit, but before you go to the treadmill, keep reading please.

Lifestyle 3: the right kind of exercise that optimizes testosterone

If we want our testosterone back we have to move, what means exercise. But stop lacing your running shoes and hear me a little more, because the exercise you are probably thinking about won't get your testosterone back, on the contrary.

Running forever will lower your testosterone³⁰, distance runners show significantly lower levels of T. Yes, that's true and there are more studies regarding the issue³¹. I can hear a sigh of relief by many of you that, like me, find the treadmill so boring and time consuming that you want to kick it when you see it

We want to lose body fat because, as we know, it hinders our testosterone, but traditional "cardio" or endless jogging is not the optimal way³² to do it (I've referenced only one of the countless studies). It will destroy our joints and testosterone before it touches the fat.

If we want to lose fat we must understand that diet and hormonal balance will have much greater effect than exercise and, above all, much greater effect than running or traditional "cardio" (jogging, cycling, etc.)

I mean, for me (about 155 pounds) twenty minutes of jogging can burn about 130 Kcal (yes, I searched that on Internet), I can recover that energy eating **one single chocolate cookie!** So if I had to lose fat with "cardio" I should jog until everybody around me speaks Chinese.

So what kind of exercise will rise our testosterone?

Well, this is not an easy question. Studies have shown that weight lifting (resistance training, pumping iron or whatever you want to call it) increases testosterone³³, WHEN done in a certain way (acute and heavy). That promotes

The testosterone Report - Derek Moody

muscle building, due to the presence of more testosterone. We saw in previous studies how resistance training and high fat meant higher levels of T too.

So we are going to lift heavy (but not too heavy) weights and, above all, we will need long recovery periods, because overtraining is going to cause lower levels of testosterone and higher levels of cortisol (as we saw cortisol is one of the antagonists of testosterone, so resting is critical).

Resistance training, but not often and with long periods of resting, does not sound too bad and it will make wonders for our physical appearance, bone density and aging.

Because many testosterone problems come from aging, chances are that you are a middle-aged men. Resistance training will take away years from your appearance and will improve your posture.

I'm not an expert in sports and I'm not a role model, by far. I practice Mixed Martial Arts as a hobby and I lift weights three times a week (a brief session with compound movements that engage many muscles). It's good for my sport and it gave me a much better body when combined with diet.

Besides that I do, once a week (maybe two), high intensity interval training, which is very useful for my sport also.

If you want to lose waist inches "*traditional cardio*" is not the optimal way. Try interval training (I searched the calories and cookie thing in the Internet, do the same with this). Brief intense exercise (like sprinting) with long recovery times (that will depend on your age, etc.) is the way to go.

Do you want the best? I can not recommend enough the book "*Body by science*" by Doug McGuff. Buy it, follow what it says and you will be optimizing everything.

The testosterone Report - Derek Moody

By the way, as you imagine, the book goes contrary to *“traditional wisdom”* and almost everything you knew about exercise. But if you are still reading this, you will be thinking that, as Mark Twain said: *“Whenever you find yourself on the side of the majority, it is time to pause and reflect”*.

The shocking turn of events

I changed my diet, I was changing my whole lifestyle, getting enough rest most of the time, being smart with exercise, taking it easy with alcohol, etc. And I got good results, really, but not as good as I imagined. I wanted all my energy back, I wanted my focus, my motivation, my drive and I wanted some more morning erections that, well, they were kind of returning but not very much. Everything was getting better but something was missing, something was not entirely right, I could feel it and I had to push one more button that I had not discovered, yet.

And then it happened, almost by “*chance*”, as many important things in life do. In about two or three weeks after that little change, everything clicked.

One problem with this topic is that, unlike the rest of this pages, I'm not saying it is a scientific truth proven by many studies. Unfortunately I can assure you that everything shady about this issue, which, in my book, it's a big red warning sign to start.

One day I stumbled into an Internet forum researching about testosterone and some guy talked about his problems in bed and... Aspartame.

Yes, aspartame, the artificial sweetener that substitutes sugar and is present in every diet soda and many other things we buy, like low fat products and other “*fake*” foods.

“Aspartame? What the hell? Is that thing dangerous? Why do they put it on food if it's so dangerous?”.

After saying that I remembered all the other things in this book, so I took a magazine, carefully rolled it and proceeded to hit myself in the head with it. I displayed so much idiocy in so few words...

The testosterone Report - Derek Moody

Some more guys got into the conversation and commented about their aspartame experiences too and how it affected their masculinity.

You know, an Internet forum is not exactly the most accurate way to get good information (sorry to break the news), but I decided to go deeper, to see if there was some scientific proof to it. I wanted to watch with my own eyes and think for myself, as always.

And I did it, because I was drinking two cans of diet soda daily for almost two or three years, and I was a big sugar-free chewing-gum eater since I could remember. I always had one in my mouth, those were my guilty pleasures and I thought nothing was wrong with something that was as caloric as water.

As I researched more, another word was added to my dictionary: excitotoxins.

Basically, they are toxins that excite our nerve cells so much that they die. Things like glutamate or aspartate (present in, oh surprise, aspartame) do that.

If you go to the studies many of them conclude that aspartame is safe, well, better said, aspartame is not safe, it is a toxin, we know that, but our “normal” daily dosage seem harmless.

In fact, some controversy sparked in the Internet about this. Someone said that aspartame was venom and it was regarded as a hoax but so much noise was made that a new study chimed in to stop the controversy and saying that even large dosages of aspartame were safe³⁴.

Well, this was becoming confusing but it seemed that there was no reason to worry (you know even when aspartame is clearly a toxin, but it seems ok to put that in ourselves). Then I read this at the end of the press release of the study I’ve just referenced.

“The study was conducted at MIT's CRC. Electro-encephalograms were done at the Beth Israel-Deaconess Medical Center in Boston. This work was supported by a

The testosterone Report - Derek Moody

grant from the NutraSweet Co. to the Center for Brain Sciences and Metabolism Charitable Trust.”

Wait.

What?

Nutrasweet? I'm not American so I did not recognize the name at first, but it didn't sound very independent. Then I found that Nutrasweet makes aspartame, but you know, you can not question the business ethics of a multimillion dollar company, right?

I used again the rolled magazine against me and I decided to know more.

One of the main points regarding aspartame is that the blood barrier protects our beloved brain from the excess of neurotoxins like aspartate and glutamate. If they pass the barrier, they can kill certain neurons, allowing too much calcium into the cells if they reach them, but, supposedly, the toxins don't pass.

So we eat toxins, but our brain is protected. Fair enough, because that's true (at least to a point), our bodies are wise even when we are idiots, but take a look at this:

Small children don't have the barrier fully developed (at least they advise against sugar-free stuff and children, in a very little font size, of course), some conditions can damage the barrier (mmmh, not good), some physicians I read said that it does not fully protect against all the glutamate or aspartate (damn, I don't know if it's entirely true, but this seems fishy) and, above all, one thing we know for certain is that **not every part of our brain is protected by the blood barrier...**

What? What parts?

The Area postrema, a zone made to detect toxins and send the signals that say: *“vomit, you dumbass, you are taking toxins”*. Ok, I get that, it's logical to leave that out because it has to feel the effects to raise the alarm.

The testosterone Report - Derek Moody

The pineal gland is out too. It needs to secrete and send to the blood the hormones that influence our circadian rhythms (you know, the sleep/wake cycles). Well, I don't appreciate that much, good sleep is good testosterone.

The Posterior Pituitary Gland is another unprotected part, because their hormones must reach the bloodstream too (wait a minute, some things were making a connection, I could hear the rusty gears of my brain moving).

Another unprotected part: the Median eminence of the hypothalamus, that's the link between the hypothalamus and the pituitary gland. Again it's not protected because hormones secreted by the pituitary gland gather there before they are secreted into the bloodstream.

Maybe you read that and your sleepy neurons sparked like a Christmas tree, because they remembered something I said in the beginning... The hypothalamus, right? And then the order goes to the pituitary gland! Well, the hypothalamus passes the initial hormones to the pituitary gland to get the cycle of testosterone started. If you forgot that, read again the part about how testosterone is made.

And that very mechanism is not protected by any blood barrier, so it's quite possible that Aspartame mess directly with the commander in chief of our manliness.

I went deeper, and aspartame does very nasty things, like methanol (i.e. Wood alcohol) in the body when taken. That alone is a good reason to kick it, but I wanted to know how it specifically related with testosterone, because it's real that it's a neurotoxin (no one denies that) and precious parts of the brain (the ones related with testosterone) are not protected against it.

I found a study about rats and aspartame. The conclusion was that their pituitary glands and hypothalamus were messed up thanks to the substance, so the testosterone production went very bad, because the mechanism responsible of testosterone (the circuit of LH hormones, etc.) went to hell³⁵.

The testosterone Report - Derek Moody

The rats were in a prepuberal stage (they were becoming adult rats) and I quote the study.

“The degenerative aspects of brain and pituitary observed in Aspartame-treated rats suggests that it is reasonable to assume that the same infant-to-adult relationship would be true for the Aspartame consumption in humans to children in the prepubertal period of development, especially.”

So there is scientific evidence that supports that aspartame is not so harmless to our beloved hormone, and that I was not misguided with my early suspicions about the toxin messing up with the testosterone creation mechanism, in its very starting point.

I decided to drop every gram of aspartame just because it's a toxin, but this added weight to my quest for recovery. Goodbye guilty pleasures, it was not nice to know you.

I tossed completely diet sodas and chewing gum, I was going to be my own study subject, and two or three weeks after dropping aspartame the results exploded. I awoke some mornings with a tent in my sheets (if you are a man, you know that I had to say this at one point or another), my penis seem larger and healthy again when resting, instead of shy and retracted. And my mood, my drive, my focus multiplied, fueled by my changed lifestyle and the absence of excitotoxins.

I was consuming a good dose of aspartame daily for years (I even noted other side effects sometimes, like a constant sweet sensation in my mouth, that altered how other food tasted) and I can feel that I'm not fully recovered yet, but I know one thing, dropping aspartame was a multiplier to all of the other changes.

If you don't mess with aspartame you have been smarter than me, if you do, try for yourself. I don't want to be sued by some big corporation so I'll just say: *“try and see”*.

The testosterone Report - Derek Moody

And (for the first time in this pages I'm going to ask that) trust me, I know that I'm not the only one that after quitting aspartame started recovering his testosterone.

Now, here ends the free testosterone report. As you can see, it's full of information and, if you think this can be helpful to anyone, please pass it on.

Do you want more? Take a look to the whole Testosterone Book, with all the information about how to increase your testosterone naturally.

Referenced Studies

¹ University of Zurich (2009, December 9). Testosterone does not induce aggression, study shows. ScienceDaily. Retrieved April 21, 2011, from <http://www.sciencedaily.com/releases/2009/12/091208132241.htm>

Eisenegger et al. Prejudice and truth about the effect of testosterone on human bargaining behaviour. Nature, 2009.

² Vermeulen, A. (1996). Declining Androgens with Age: An Overview. In Vermeulen, A. & Oddens, & B. J. (Eds.), *Androgens and the Aging Male* (pp. 3-14). New York: Parthenon Publishing.

³ S. Dhindsa, M. G. Miller, C. L McWhirter, D. E. Mager, H. Ghanim, A. Chaudhuri, P. Dandona. Testosterone concentrations in diabetic and non-diabetic obese men. *Diabetes Care*, 2010; DOI: 10.2337/dc09-1649

⁴ Dhindsa, S. *The Journal of Clinical Endocrinology & Metabolism*, November 2004; vol 89: pp 5462-5468.

⁵ Zoppi, F. R., et. al. (2002). Sexual activity and plasma testosterone levels in hypertensive males. *American Journal of Hypertension*, 15(3), 217-221.

⁶ Interrelation between plasma testosterone and plasma insulin in healthy adult men: the Telecom Study

D. Simon, P. Preziosi, E. Barrett-Connor, M. Roger, M. Saint-Paul, K. Nahoul and L. Papoz

⁷ Increasing Insulin Resistance Is Associated with a Decrease in Leydig Cell Testosterone Secretion in Men

Nelly Pitteloud, Megan Hardin, Andrew A. Dwyer, Elena Valassi, Maria Yialamas, Dariush Elahi and Frances J. Hayes

⁸ Evidence for sugar addiction: Behavioral and neurochemical effects of intermittent, excessive sugar intake.

Neuroscience & Biobehavioral Reviews

Volume 32, Issue 1, 2008, Pages 20-39

Nicole M. Avenaa, Pedro Radaa and Bartley G. Hoebel

Department of Psychology, Princeton University, Princeton, NJ 08540, USA

The testosterone Report - Derek Moody

⁹ Induction of Estradiol Metabolism by Dietary Indole-3-carbinol in Humans, JNCI J Natl Cancer Inst (1990) 82 (11): 947-949. doi: 10.1093/jnci/82.11.947

Jon J. Michnovicz and H. Leon Bradlow

¹⁰ Effects of dietary zinc depletion on seminal volume and zinc loss, serum testosterone concentrations, and sperm morphology in young men

CD Hunt, PE Johnson, J Herbel and LK Mullen

United States Department of Agriculture, Agricultural Research Service, Grand Forks Human Nutrition Research Center, ND 58202.

¹¹ Lisa C. Vinikoor, Jane C. Schroeder, Robert C. Millikan, Jessie A. Satia, Christopher F. Martin, Joseph Ibrahim, Joseph A. Galanko, and Robert S. Sandler

Consumption of trans-Fatty Acid and Its Association with Colorectal Adenomas

Am. J. Epidemiol. (2008) 168(3): 289-297 doi:10.1093/aje/kwn13

¹² J Toxicol Sci. 2010;35(5):743-7.

Testosterone-lowering activity of canola and hydrogenated soybean oil in the stroke-prone spontaneously hypertensive rat.

Okuyama H, Ohara N, Tatematsu K, Fuma S, Nonogaki T, Yamada K, Ichikawa Y, Miyazawa D, Yasui Y, Honma S.

¹³ Wang C, Catlin DH, Starcevic B, Heber D, Ambler C, Berman N, Lucas G, Leung A, Schramm K, Lee PW, Hull L, Swerdloff RS. "Low Fat High Fiber Diet Decreased Serum and Urine Androgens in Men." J Clin Endocrinol Metab. 2005 Mar 1. PMID: 15741266.

¹⁴ Hamalainen E, Adlercreutz H, Puska P, Pietinen P. "Diet and serum sex hormones in healthy men." J Steroid Biochem. 1984 Jan;20(1):459-64. PMID: 6538617.

¹⁵ Testosterone and cortisol in relationship to dietary nutrients and resistance exercise

JEFF S. VOLEK,^{1,2} WILLIAM J. KRAEMER,^{1,2,3,4} JILL A. BUSH,^{1,2} THOMAS INCLEDON,^{1,2} AND MARK BOETES^{1,2}

¹⁶ Schuler, Lou. The Testosterone Advantage Plan. Rodale: USA, 2002.

¹⁷ University Of Minnesota (2005, May 2). Food Fried In Vegetable Oil May Contain Toxic Compound. ScienceDaily. Retrieved April 26, 2011, from [http://www.sciencedaily.com /releases/2005/05/050502190054.htm](http://www.sciencedaily.com/releases/2005/05/050502190054.htm)

The testosterone Report - Derek Moody

¹⁸ Testosterone and cortisol in relationship to dietary nutrients and resistance exercise

Jeff S. Volek^{1,2}, William J. Kraemer^{1,2,3,4}, Jill A. Bush^{1,2}, Thomas Incledon^{1,2}, and Mark Boetes^{1,2}

¹⁹ Regulation and perturbation of testicular functions by vitamin A

G Livera, V Rouiller-Fabre, C Pairault, C Levacher, and R Habert

002 Society for Reproduction and Fertility

²⁰ Bishop, D. T., Meikle, A. W., Slattery, M. L., Stringham, J. D., Ford, M. H., West, D. W., Borecki, I. B. and Rao, D. C. (1988), The effect of nutritional factors on sex hormone levels in male twins. *Genetic Epidemiology*, 5: 43–59. doi: 10.1002/gepi.1370050105

²¹ *Med Sci Sports Exerc.* 2009 May;41(5):1102-10.

Athletic performance and vitamin D.

Cannell JJ, Hollis BW, Sorenson MB, Taft TN, Anderson JJ.

²² Effect of vitamin D repletion on testicular function in vitamin D-deficient rats.

Sood S, Reghunandanan R, Reghunandanan V, Marya RK, Singh PI.

²³ Association of Vitamin D Status with Serum Androgen Levels in Men

E. Wehr; S. Pilz; B. O. Boehm; W. März; B. Obermayer-Pietsch

Posted: 09/17/2010; *Clin Endocrinol.* 2010;73(4):243-248. © 2010 Blackwell Publishing

²⁴ Vitamin K deficiency reduces testosterone production in the testis through down-regulation of the Cyp11a a cholesterol side chain cleavage enzyme in rats

Hitoshi Shirakawaa, Yusuke Ohsakia, 1, Yoshihiko Minegishia, Naofumi Takumia, Kousaku Ohinataa, Yuji Furukawaa, Takeo Mizutanib and Michio Komaia

²⁵ Garlic Supplementation Increases Testicular Testosterone and Decreases Plasma Corticosterone in Rats Fed a High Protein Diet

Yuriko Oi¹, Mika Imafuku, Chiaki Shishido, Yutaka Kominato*, Syoji Nishimura* and Kazuo Iwai

Laboratory of Nutrition Chemistry, Faculty of Home Economics, Kobe Women's University, Suma-ku, Kobe 654-8585, Japan and; * ; Riken Chemical Industry Limited Company, Fushimi-ku, Kyoto 612-8404, Japan

The testosterone Report - Derek Moody

²⁶ EFFECTS OF ACUTE ALCOHOL INTOXICATION ON PITUITARY-GONADAL AXIS HORMONES, PITUITARY-ADRENAL AXIS HORMONES, {beta}-ENDORPHIN AND PROLACTIN IN HUMAN ADULTS OF BOTH SEXES - Frias et al. 37 (2): 169 - Alcohol and Alcoholism. Alcalc.oxfordjournals.org. doi:10.1093/alcalc/37.2.169. Retrieved 2009-10-15.

²⁷ Testosterone Increases in Men After a Low Dose of Alcohol

Taisto Sarkola, C. J. Peter Eriksson

²⁸ Sleep loss results in an elevation of cortisol levels the next evening.

Leproult, Rachel; Copinschi, Georges; Buxton, Orfeu; Van Cauter, Eve

Sleep: Journal of Sleep Research & Sleep Medicine, Vol 20(10), Oct 1997, 865-870.

²⁹ Mood changes, body mass index and bioavailable testosterone in healthy men: results of the Androx Vienna Municipality Study.

Kratzik CW, Schatzl G, Lackner JE, Lunglmayr G, Brandstätter N, Rücklinger E, Huber J.

³⁰ Reduced Serum Testosterone and Prolactin Levels in Male Distance Runners

Garry D. Wheeler, MS; Stephen R. Wall, MA; Angelo N. Belcastro, PhD; David C. Cumming, MB, ChB

³¹ Testosterone Is Significantly Reduced in Endurance Athletes without Impact on Bone Mineral Density

L. Maimouna,b, S. Lumbrosoc, J. Manettad, F. Parisc, J.L. Leroux, C. Sultanc

³² King, J., Panton, L., Broeder, C., Browder, K., Quindry, J., & Rhea, L. (2001). A comparison of high intensity vs. low intensity exercise on body composition in overweight women. *Medicine and Science in Sports & Exercise*, 33, A2421

³³ Loebel, C.C., and W.J. Kraemer. A brief review: Testosterone and resistance training in men. *J.Strength and Cond.Res.* 12(1):57-63. 1998

³⁴ Aspartame: neuropsychologic and neurophysiologic evaluation of acute and chronic effects

PA Spiers, L Sabounjian, A Reiner, DK Myers, J Wurtman and DL Schomer

The testosterone Report - Derek Moody

³⁵ ULTRASTRUCTURAL ASPECTS CONCERNING THE
HYPOTHALAMUS-PITUITARY COMPLEX REACTIVITY FOLLOWING
CHRONIC ADMINISTRATION OF ASPARTAME IN JUVENILE RATS

Constantin PUICĂ, Constantin CRĂCIUN, Mircea RUSU, Mihai CRISTESCU, Maria BORSA, Ioana ROMAN

Biological Research Institute, Cluj-Napoca

Babes-Bolyai University, Electron Microscopy Center, Cluj-Napoca

University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca