



Transcript of “The Doper Next Door with Andrew Tilin”

Bulletproof Radio podcast #18



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Dave: Today's cool fact of the day is that the velocity of a sneeze is around 100 miles an hour and when you sneeze it can actually travel up to 5 ft. which is kind of gross. Sneezing is your way of keeping your nose clean and usually it comes from dust or some other thing. Sometimes even a strong immune response that causes your mucus membranes to be irritated. It's true. It's impossible to sneeze with your eyes open and you can't sneeze when you're asleep. If you do sneeze it will change your heart rate variability but your heart won't stop functioning when you sneeze even though urban legends say that's true.

You're listening to episode 18 of Upgraded Self Radio with Dave from Bulletproof Executive blog.

We have a great interview today with Andrew Tilin the author of a book called The Doper Next Door. Andrew talks about his experience with performance enhancing drugs during a competitive season of bike racing. We talk about the pros and cons of his experiment and we try to educate people on the use of steroids.

Co-host: Now we're going to move on to our exclusive interview with Andrew Tilin.

Dave: In the name of science Andrew Tilin became a citizen doper. In 2008 this freelance writer and amateur cyclist used supplemental testosterone and DHEA to improve his cycling performance. He chronicled his journey in his book called The Doper Next Door. Andrew has written for many publications including the New York Times, Wired, GQ, Rolling Stone, Yoga Journal and Runner's World. He was also a senior editor for Business 2.0 and is a contributing editor for Outside Magazine.

He joins us today to talk about his experience with doping, the dangers, the perks and how it changed his life. Andrew, tell us, what prompted you to experiment with steroids in the first place?

Andrew: I like to think of it Dave as a social experiment, really a social experiment and seeking and finding youth. That's not necessarily how it started, but that's ultimately what happened. It became a social

experiment not just for myself but for my family, friends and a larger circle of people.

Dave: Do you mind if I ask how old are you now and how old were you when you started your social experiment?

Andrew: Yeah. I'm 46 now. I was 42 when it began and it began both as an interest in feeling young again and it also began as a long time journalist following athletics, following lead athletes, seeing what they could do and knowing that there was a lot of doping going on and wondering what would it be like for a regular guy to do this kind of thing. What would it be like for a face in the crowd so to speak to take these drugs? Do other people do that?

I was a bike racer, a road racer at the time and I would go to these races and I'd be convinced that there were others doing it. I went through a long process of actually trying to find a "citizen dooper" to write about. I wanted to write a story, a magazine story or a book about someone's experiences doing this kind of thing. That was a long process, maybe 6, 7 months of really hard looking before. For various reasons I decided to become the lab rat myself.

Dave: I wish we had known each other back then. I've been taking supplemental testosterone for the last decade except for the last 2 months because people say that my gains come from that not from the diet so I quit doing it just to show that the diet works by itself. We would have had a good time chatting back then.

Andrew: Were you a bike racer too?

Dave: I was a bike racer before that but I was too busy being an entrepreneur to be a successful racer. I'm intrigued to go further into our discussion. Can you tell our listeners which performance enhancing drugs or hormones you used just so they can get an idea of the scope of your experiment?

Andrew: Sure. I used testosterone that was the big hitter and of course that is a taboo drug to many red blooded males. We know all about testosterone from what we hear on ESPN or even Sports Illustrated or read in the

sports pages because it's a prohibited substance because it promotes the growth of muscle tissue potentially to simplify. It was easy for me to access that was also important hence the name of the book, The Doper Next Door.

I took another hormone to DHEA, another prohibited substance in sports, many sports. I took that sort of to prime the pump for testosterone or so I was told by my hormone guru. I took only those 2 drugs because that's what was suggested to me. I also only took those drugs because I wanted to prove a point with this book and that is how easy it is to access particularly testosterone.

Middle aged guys nowadays all they need to do is watch golf on television to see giant pharmaceutical companies advertise for supplemental testosterone and to promote testosterone supplementation. They just need to go to their doctor. Well, not just, but they go to their doctor and have a frank conversation about maybe how they're feeling, have blood work done. A highly interpreted read of their testosterone levels follows and then they may or may not be given supplemental testosterone. That's why I stuck with those 2.

The other reason I stuck with those 2 Dave was to go further up the ladder in terms of performance-enhancing drugs. Human growth hormone, erythropoietin or blood enhancers I would have had to go to a black market so to speak. I would have had to buy those drugs illicitly. My doctor wouldn't prescribe me those drugs. That wasn't within the spirit of the book which is how every man could be a "doper."

Dave: You skipped Modafinil and Adderall or commonly known as meth which ... certainly on the meth side of things would have been a good idea to skip.

Andrew: I'd be talking out of school to talk about things. I don't know about those drugs.

Dave: Okay, so you skipped those ones. You focused on performance-enhancing hormones which is important. Now, you mentioned that it

was relatively easy to find testosterone and what form did you take it in and where did you get it? How hard was this?

Andrew: Yeah. Really this whole experiment began with my wife. My wife, she's about my age and she was going through some early hormonal changes. I would notice these hormonal changes quite often either in her mood or her libido or lack thereof or the fact that she'd wake up in the middle of the night with night sweats. She ultimately went to a women's health doctor, was given hormone replacement therapy and I saw that these hormones created powerful changes in her body. I was impressed and wowed and just did some internet surfing on that and discovered that many middle aged men were being prescribed testosterone too and there were lots of websites speaking to this.

I went to my doctor and I said, "Do I need this stuff?" This is my primary care physician. I had blood work done and my blood work indicated that I was quite low within a "normal range" but very low within this normal range. My primary care physician said, "No, you don't need it." I wasn't satisfied. At that point I'm a journalist, I was curious. I had read a lot about it. I read about a lot of people taking in testosterone is a billion dollar supplement industry, millions of prescriptions are written for testosterone every year so I went to a couple other doctors and got, including my neurologist, my neurologist wanted to put me on a modest amount of testosterone.

Again, I'm a journalist I wanted to tell the biggest and most compelling story I could within the realms of taking this drug. I embarked on a little mission to talk to doctors in the anti-aging community and anti-aging is an offshoot of medicine so to speak. Some people think that it's mere quackery. Other people would say no, there is some ... you're going to see the anti-aging medicine which doesn't ... These people, and they are physicians and some of them are not. They don't want you to live forever. They want your quality of life to be as high as it can be and as long as it can be. They believe that testosterone has a place there.

I ended up going to a couple of anti-aging doctors. One scared me because he was willing to give me testosterone without really monitoring my blood levels very closely, but then another woman was

very thorough and looked at my same blood levels that my primary care physician had looked at and said, “You should be on this.”

She worked with a woman by the name of Susie Wiley, has a protocol called the Wiley Protocol both for women and for men and the one for men is a testosterone protocol and it is very aggressive. It’s very high levels of testosterone. Again, in the spirit of telling a great story I started on this protocol and it was a topical, cream based. I would put it on my groin and on my back between the DHEA and the testosterone often twice a day. The T twice as I came to call testosterone, the T twice a day DHEA once.

Dave: It’s kind of funny. We actually had Wiley on a very early incarnation of the show.

Andrew: What was that like?

Dave: She’s an interesting lady. She’s certainly has a very strong opinion. I’ve met her in person. She actually gave me a copy of her book Sex, Lies and Menopause at an anti-aging show. I didn’t mention this at the beginning of the show but I’ve run an anti-aging nonprofit like education research group for, good god, I’ve been involved in leadership there for almost 10 years. A lot of what I do comes from anti-aging and I hang out with a lot of the same kind of doctors you’re talking about there and [inaudible 00:11:24].

It’s about living more and living longer, not living forever which is an important thing a lot of people don’t understand.

Andrew: Yeah, that’s an important distinction and that actually to me lends to the credibility of that industry and it also ... that industry asks a lot of questions that the traditional medical industry can’t answer or is unwilling to go to. There’s a lot of profit built into the traditional medical industry and big pharmaceutical industry anymore. That’s the part that I find highly compelling about it, the anti-aging world. The problem is is that there’s still some questionable characters promoting things that you just don’t know about and that frankly they don’t know

about. Susie herself will be the first to tell you that she is a citizen scientist.

Now, does that mean that we shouldn't listen to her because she's not a PhD or an MD? The answer is I don't. She is very charismatic and passionate. Her arguments are well scripted.

Dave: Her books too are ... 1/3 of the length is usually references. I would not want to get into an argument with her about hormones are bad for you in all cases because I absolutely know that you'd lose.

Andrew: Well, she came to one of my readings in Albuquerque, New Mexico. I was reading from this book and my book is both supportive and critical of Susie. I honored the way that she approached the discussion, the debate we had afterwards, the dialogue. At the end of the day Susie just does not understand why in god's name any middle aged man who's low in testosterone would not be on it. It's like 2 plus 2 equals 5 in that equation for her if you're not on it. That's her perspective.

Co-host: Andrew, we've talked a little bit about some of the problems with finding practitioners who know what they're talking about. What were some of the biggest challenges you've faced throughout your entire experiment?

Andrew: Well, one was that, that was the start. I finally found an internist with many, many years experiences, an MD and again, it doesn't necessarily legitimize someone or delegitimize someone, but I felt like she had a broad perspective and she had valid thinking. She was very forthcoming with me in terms of saying, "You're a guinea pig. You're part of a large experiment. I'm going to watch you carefully. I'm going to monitor your blood levels 4 times a year. It was about a year long experiment and I'm going to tell you to go higher or lower or I'm ... I'm going to be a critic. I'm not just going to be a cheerleader saying take more." She had a raised eyebrow while still prescribing it to me which I felt was very healthy.

I pushed her to give me human growth hormone because I wanted to try that. She was like, "You're out of your mind. I won't do it. Not enough

science there. I could lose my license for prescribing it to you. I could get in a lot of trouble and you don't need it." I honored her for that. I felt that that was reassuring. It was disappointing in a certain way but reassuring and also reassuring for my health. I didn't want to hurt myself doing this experiment. The growth hormone science is not complete.

Other than that my other concerns I have a family, I have a wife, I have children and I worried about or I wondered, part of going back to what I call the social experiment, what was life going to be like talking this stuff and having a family around them. The opening of a book is both funny and dark, I'm in my bathroom putting on the testosterone for the first time and I'm nervous and my kids are on the other side of the door just banging on it because we're going to be late for school and I'm taking them to school. I asked myself, "Did Jose Canseco have moments like this?"

I wondered too what was this stuff going to do to me. Was it going to make me stronger, faster, more masculine, more macho or is it going to make me a jerk? Was it going to make me scary? Was it going to make me sick? Was it going to change my relationships? I would say that the year that followed hit on a bunch of those notes.

I'd be interested to know Dave how much testosterone you took and how you took it.

Dave: I took it in a cream form. It's a bio identical form of testosterone that's compounded for me. I took about 10, I'm blanking on whether it's micrograms, milligrams a day.

Andrew: Something grams, something small.

Dave: Yeah, it's kind of crazy I'm not thinking of it right now. Yeah, I did that for almost 10 years. I measured the blood levels a couple of times a year after the first year and for me it had really positive mental effects as well as physical effects, but keep in mind I was obese for the first half of my life. I used to weigh 300 lbs. I weigh 200 lbs now and because of that my estrogen levels were very high and my testosterone was pretty

much at old man level even though I was only 30. There was a therapeutic reason-

Andrew: Oh wow, that's quite a tale.

Dave: It is quite a tale but part of the tale is that I've been off of it for a while and throughout those 10 years I've gone off for a couple of months here and there just to see what would happen. Pretty much I'm able to self sustain without it. I'm going to go off of it for at least 6 months now and look at the effects of just the Bulletproof Diet which itself very testosterone friendly and look at what you can do nutritionally. I'm almost 40 now. I just turned 39 earlier this year. I'm getting older but I'm seeing what happens without the testosterone just because I think I can, but I don't think there's anything wrong with taking it. I think it helped me enormously.

Andrew: Uh-huh (affirmative), well you were certainly in a different place in your life than I was with mine. I was already ... I'm a little guy. I don't carry a lot of extra body weight. I'm just built small, 5'8" 145 lbs and I was fit. I was adding this to the regimen.

Dave: You're the perfect cyclist frame. How did this affect your performance actually? What did it do to your times or your heart rate? How did you measure your performance on this?

Andrew: Yeah, so I think let's be clear here. I'm a journalist. I'm not a scientist. I'm one guy. This is not any sort of scientific experiment. This is an unscientific guy next door experiment. I had what's called a power meter for my bicycle. A power meter is an elaborate electronic device that actually measures the power that your legs push into each pedal stroke as you pedal a bicycle. It's a very scientific way to measure your performance. I say that not to toot my own horn but to say that that's how power meters are basically the ways that virtually every pro cyclists use to improve upon their performance. Their coaches and support staff hook their bikes with the power meters so I had one of those.

My power went up dramatically over the course of that year. These numbers won't mean anything just floating around but from 260 watts I can hold ... It went up to 310 watts now. I will tell you that I also trained harder and I trained harder for a couple of reasons one being the passion. I mean it just became more and more fun. These are what the testosterone really helped me with.

Scientists will argue but this is my experience. It was a recovery drug for me. It allowed my body to snap back more quickly from hard workouts. What that enables you to do of course is to work out harder more often and then it just snowballs. The harder you can work out and the more often you can do it and the faster your body recovers the fitter you're going to get.

The testosterone will turn anybody into ... Will any performance-enhancing drug will turn anybody into a world caliber athlete? The answer is no. You have to add training to the mix. So many of these drugs will actually help you recover which will help you to train.

The most scientific aspect was that. Of course I also had my blood measured and my testosterone measured within my blood. I went from the high 200s in terms of testosterone content in my blood and it's a unit of measure to I believe it was nearly 800. That is the high end of normal. I still was in the normal spectrum. In fact, Susie Wiley ultimately wanted to give me more testosterone but I felt like I had plenty going on because I had all sorts of other feelings. In terms of my performance it was that ability to recover.

I went to races and I raced and I know I was breaking the rules. That was part of the experiment too for myself for my own head, for my friends, for my fellow racers, what's it like to race either as or with a dooper. I did better in my race. I'm not a great bike racer. I'm at the entry level and cat 4 as you would say. I'm not a cat 2 or 1 but I felt like that helped me in terms of the book because I wasn't sort of ... at the end of the day I wasn't racing anybody as a livelihood. We are racing for fun and bragging rights and maybe a new tire or a case of power bars. You don't race at that level to make a living.

I did better in those races and I would dictate in those races. I felt like I had a lot of power late in those races and I would sort of break apart the group and force people to ride fast to keep up with me. I wasn't smart or good enough to win fortunately or unfortunately but I tried.

Dave: You got an increase in performance, an increase in recovery and an increase in passion, it sounds like this was good for you. What was the down side here?

Andrew: Well, there was a lot that's good. In terms sheer black and white one down side was of course I was breaking rules. Right or wrong that a 40 something man should be racing against 20 somethings and I did race against 20 somethings in some of my races because the way the category shook out and the race is shook out I would be racing against guys half my age. I don't think it's necessarily fair that a 40 year old has to race against 20 somethings but those are the rules and I wasn't playing by them. One down side was I broke rules. I ultimately paid for it in terms of being suspended from bike racing for 2 years, being banned from the sport and all my results being erased from my year of doping.

Beyond that my relationships were challenged. There's a term called roid rage which the medical community does not embrace, does not believe exists but there are some experts, hormone experts who believe that an excess of testosterone might prime the pump in someone who is irritable, someone who's prickly and I can be prickly and I would get short. I had arguments with my wife and my children. My children were too young to really know what was going on. During the experiment they were in the 8 and 6 range.

I felt like they were victims at times of my short fuse and my anger. It never got to the point where I was tearing apart my home or throwing things or anything like that but I did get to the point where I was having bad arguments with my wife. She was saying this is not the person I know. That sort of coupled with the fact that Wiley had me on very high amounts of testosterone, much higher than yours Dave. It was cyclical. It wasn't a consistent amount over the course of each month. The

deepest and highest parts of the cycles when I have taken the most I seemed to be the most prickly.

I would say the other challenge was that like you mine was a topical but I was using gobs of it and I had to be very careful in terms of not getting it on towels or sheets or clothing or it might rub on to members of the family. I worried about my children. There are some isolated cases reported to the US government about ... It's called virilization which is when kids are exposed to hormones testosterone and their bodies develop prematurely. It's just a bad thing. I didn't want my 8 year old sprouting pubic hair. There are documented cases of that.

I had to be careful. In fact, a strong argument could be made that my testosterone did rub off on my wife and her levels went through the roof. Her women's health doctor at one point was like, "You're on your way to becoming a man. You guys got to be more careful."

Dave: I don't want to cross into too personal areas here, but I know some of the followers in my blog, some women who occasionally have used testosterone for its performance enhancing benefits more for quality of life, we're talking relatively small amounts maybe even less than your wife got. They've generally reported that in very small doses that just their passion at work, their sex drive and just their energy throughout the day skyrockets without growing a mustache. Did you see any of that in your relationship or was it mostly a negative effect on your wife as well?

Andrew: Dude, there were many positives.

Dave: Okay, that's what we're talking about. I sleep in the same bed as my wife.

Andrew: Her levels just got very high. I was concerned. Although Susie Wiley argues otherwise and I stated that in the book that Wiley didn't believe that my cream was rubbing off on her, but my doctor, the intermediary between me and Wiley definitely was concerned about what's called contamination. Yeah, Wiley doesn't prescribe. She's not an MD. She suggests that women go to a doctor and perhaps in their midlife take

some testosterone like your listeners, people taking small amounts for added libido. Perhaps aggressiveness is not the right word, but maybe added assertiveness, maybe stronger in their convictions.

I was all those things too. Yeah, there was that funny blurry line between what was considered a little too agro on my part and what was considered swagger and fun and assertiveness. My libido shot through the room I mean to the point where I would touch myself looking at women in ways that I hadn't done since I was a teenager. It was all at one sort of like highly entertaining, a lot of fun and supremely obnoxious. I was like, "Wow, who am I now?" That spilled over into my relationship with my wife and that was largely a good thing and combine that with her being contaminated and her drives and swagger going up. Yeah, there were fireworks that were really, really fun.

Again, that line is weird and blurry and inconsistent between well when does the fun stop and the questioning of this stuff begin. I never found that line during the year of the experiment. By the time her testosterone had shot through the roof it was pretty much time for me to get off, get off in testosterone that is.

Dave: You stopped it entirely and to this day you're not using even small doses, right?

Andrew: I am clean for ... This is probably not the word you like to use but it's the word that the doping cops really like for me to use because I'm a sanctioned athlete. Is that the right term? They can come in whenever they want. The US Anti-Doping Agency knows where I am theoretically every minute of everyday and they have the right to walk into wherever I am cup in hand and make me pee into it. If they find exogenous testosterone in my urine and it's easy for them to find. I will be likely banned for life from bike racing.

Dave: As long as you race this is not an option for you.

Andrew: As long as I race or I want to race it's not an option. That goes back to Wiley and the disconnect that she encounters between or she believes exists between a middle aged man who wants to be virile and athletic

and here's this hormone waiting for him to put his levels back up to where they were when he was younger man versus the rule book which says you can't do that. I understand both sides of the equation. It's a slippery slope for doping agents to say that a middle aged man who says, "Look, my levels are low." If they let that guy take the T suddenly the flood gates are open.

I will remind you and your listeners that even while pharmaceutical companies can and do prescribe testosterone and for many cases they prescribe it for men that are very low or estrogen dominant or in a way where it's a no brainer. For gray areas, people like me who is normal well there's no proof long term that this is safe. There's no proof that it's enormously detrimental but there have been long term studies using testosterone halted because of side effects, potential cardiac events as one study addressed. That was for 70 year old men, not in great health. How does that translate for a 40 something guy who wants to take it? The answer is nobody knows. Those studies have not been done.

That was another reason I stopped. What are the long term health effects of me taking this drug as a guy who's low, kind of low, interpretatively low but not lower than low. I don't know that I wanted to take that chance. I am not on the T right now even though I miss it.

Dave: You do miss it? That was actually going to be my next question for you. If there wasn't this cycling prohibition would you still be taking some of it now?

Andrew: The answer is a big fat maybe. I would have to debate it. I would have to decide in what form to take it. There are times when I think the best way to do it is with a syringe. You don't have to worry about contamination. You don't have to worry about rubbing the stuff on. It's a little bit more uneven apparently of its effect because you get this giant injection. There's no time release so it's not absorbed in any gradual fashion [inaudible 00:33:42] bloodstream. I know people that use the syringe to take their testosterone and they have done it for years that way and are happy about it.

There have been nagging questions that I would have about these long term effects and really, Dave, the bigger question here that I pose in my book is what am I chasing. I'm not saying that I'm not chasing the right thing in wanting to be younger and youthful and feel more virile, but maybe God or if you don't believe in God, some higher being or some evolutionary decree has been put down where aging is maybe part of the process of living. That doesn't float so well with the anti-aging community. They say be all you can be. Maybe being less than you can be is maybe part of having a perspective on life.

I don't know. I'm just throwing that out there.

Dave: That's where -

Andrew: Go ahead.

Dave: That's incredibly perceptive and it's definitely a debate in the anti-aging community. I've definitely angered a few people by looking them straight in the eye and saying everyone dies. The universe will come to an end at some point and you'll die then if you haven't done before. We all know it's there, but the idea of fighting against death to me isn't that interesting anymore versus making the most of every minute that I have before I die recognizing that it's going to happen. It's a little bit more of a holistic Buddhist kind of thing mixed in with the anti-aging thing.

Believing you're going to die makes it so that your life is a little bit more precious. That actually may drive you to choose to be more virile or choose to be more powerful in your life maybe even through the use of testosterone which is that weird conundrum, right?

Andrew: That's right. Or I mean the flip side of that is you may choose to have a different experience later in your life and that may be about being less in your body and more in your head and in your conscience. It may not matter to you. There were some really interesting moments when I decided to go off the stuff and to really go away from it.

First off, I failed a couple of times in trying to go off it because I didn't want to. In some of those moments I look at myself in the mirror and thought, "Well, I'm never going to be" and I wasn't buff, but "I'll never be

this powerful again.” It’s a weird feeling to consciously know that you’re not going to be the physical specimen you are at that very moment ever again unless you perhaps go back on these drugs.

Again, who is to say what it is that satisfies us and brings us happiness and wisdom and a feeling of fullness as we grow older? For some people it may absolutely be feeling strong in their bodies and sound in the mind in a way that’s been enhanced by something, some sort of additive supplement, synthetic. For other people it may be like, “You know what, I want to experience what this is like without that stuff.”

You could draw that to an extreme. It’s like, “Well, great.” Christian scientists, “Well, don’t take anything then and just suffer through pain and perhaps die an early death,” blah, blah, blah. I’m not saying that. I don’t know. There might be insight had in growing older if you do it without this stuff, maybe not. The last thing I’ll say in this point is I’m still pretty darn fit and strong. I’m in my mid 40s. I may sing a completely different tune 10 or 15 years down the line. I may be like, “Stir it all up buddy, I am missing life.” It’s a 46 year old perspective now. In 15 years it might be completely different.

Dave: That’s also a fair point. The members of the anti-aging group which is called the Silicon Valley Health Institute that I ran some of them are in their 80s and they look like they’re 60 and they’re dating 40 year olds. I could definitely say that at more advanced years the impact of things like this is it’s shocking and amazing when you have a proper anti-aging protocol that include some of these. You’re not middle ground. You’re not old and you’re in good shape so it is a very tough line and I respect the way you’re thinking about this very much.

Andrew: Well, I also think that ... I went to an anti-aging clinic in Las Vegas and sat down with the guys there at Cenegenics. I mean they were pretty clear with me. They said you are atypical. You’re atypical for somebody who’s your age. Not even because of your age but you come in, you’re ready, in good shape, you’re not overweight. Usually the people we get coming in are exhausted, have aged way too early carrying too much weight. They can be offered a second lease on life that perhaps they didn’t think was attainable now.

Cenegenics will also say you've got to improve your diet, you've got to improve your sleep, you've got to improve your fitness. It's holistic. I think that the anti-aging industry is largely that anyway. It is holistic. It's not just like take these drugs and dial back the clock. It's much more along the lines of take these drugs and be far more responsible for yourself, right? I mean wouldn't you agree?

Dave: Totally. In fact, one of my favorite anti-aging physicians, Dr. Miller in Los Gatos, California he looked at me one day and he said, "Dave, the most impactful thing that I've been able to recommend in a long time are these breathing exercises from a book called Meditation is Medicine." He said, "I can recommend this but my patients are responsible but I can't get them to do these things and it really frustrates me."

The idea of a physician looking at hormones, nutrition, supplements, exercise, sleep and then even meditation and trying to put it all together into a program to make older people feel younger it's definitely not what you get at your primary care physician but I find it valuable and I've seen it reverse the lives of older very sick people. It seems to work.

Andrew: Yeah, yeah, but we live and have been trained to live in a society where the pills and the syringes and the shots and the lotions are ... Those are the answers. We can abuse our bodies but this stuff will save us. I hate to use the word brainwash. We've been heavily influenced in that thinking by the marketing of drugs in America. Whatever people take I still think that at the end of day, including what they take, you are responsible for you. You are your best advocate. You are your best critic. Whatever you use you should be mindful of how you use it. You should be mindful of the way you treat your body period.

It's funny, Susie Wiley will debate the idea that exercise and nutrition, particularly exercise, maybe not so much nutrition, she sort of shrugs her shoulders at the ability of exercise to make us feel young but she's a big proponent of a lot of sleep I'll tell you that.

Dave: It's really funny the bigger variables seem to be nutrition, sleep and exercise. It seems like you can achieve goals with almost any one of

those 3 or certainly by focusing on just one and finding a balance of those 3 that works for you it is there. We've had guys like Bill Andrews an expert in telomeres come on and talk about the telomere lengthening effects of what I would consider to be shockingly unhealthy amounts of cardio. There really are different axes to making that decision. I'm not sure there's one right answer. I think it's an optimizing thing that you'll run your entire life, you'll optimize how you feel and perform if you're aware of how you feel and perform.

Andrew: Uh-huh, uh-huh (affirmative). Anyway, we digress, sorry.

Dave: We do.

Co-host: Speaking of enhancing performance, what were the most profound changes you noticed before dope or after your started doping and after you finished it? Another question is did you ever purposely push the limits of this experiment maybe to make the book a little more exciting since you are writing the book as you go?

Andrew: Yeah. I'm a small framed guy and I remain small framed of course throughout the experiment. I did have bigger muscles, more definition that was apparent and then that ability to recover. Again, going back to ... I would race against guys who I've been racing against for years and I'd be leaving them behind. That's a qualitative result. It was pretty apparent to all of us that some levers had been thrown inside of me.

After I got off it I was banned from racing ... Well, no, that's not true. I wasn't banned from racing for a long time afterwards because I didn't want the secret out. After I got off it, it was winter, I stopped training, I stopped taking the stuff. I did have some weird hormonal effects coming off the drugs. I was worried coming off the drugs that my hormones would go way out of whack and then I would develop man boobs which can happen.

Wiley had assured me that the brew she had concocted wouldn't allow that to happen if I went off. It didn't, but I was mildly depressed. Is that because of the hormones or is it that because the experiment was over,

the aforementioned that I'll never be the man I was kind of thing, I think it was all those things that led to my down disposition afterwards.

Co-host: Yeah, did you ever maybe spice up your activities as you were working with the book a little more?

Andrew: Yeah, well, I mean I was on like I say radical amounts of testosterone at times. I mean going from very little at one point of the month to more than body builders would use for a couple of days. That was the Wiley message. She believes that not only women, but men are on a cycle hormonally so therefore you should take different amounts just to supplement your body ... You should supplement your levels of hormones with different amounts as the month wears on.

I did not feel the need to sort of spice or spike the levels I was taking. In fact, Wiley ... It's a big no-no on the Wiley protocol to stray radically from her proposed levels. That's just her shtick. I've heard of her getting very upset with people for taking less or more than she recommends. I was a little intimidated by her. My doctor said you can stray a little bit but not a lot.

Honestly I felt like ... There was about 10 months, I stopped taking it after 10 months, but there was 10 months of plenty of spice in my life, sexually, physically, emotionally. I didn't feel the need to get kookier still. Really, I mean I tried that in terms of finding growth hormone. I don't know what you guys' feelings are about growth hormone, but again, my doctor wouldn't prescribe it to me. I wasn't going to go elsewhere for it. I was afraid, again, to have my best medical adviser be what I could find on the internet with drugs that I've gotten without medical help. Nobody had offered me growth hormone.

I went to several doctors, anti-aging doctors, none of them were outspoken in terms of offering me growth hormone. EPO which is blood enhancers is not something given to healthy people ever. For me to take that would have been a huge no-no although it would have had a huge impact on my bike racing. Blood enhancers are things that allow your blood to become more concentrated with red blood cells. You mix those drugs with an oxygen hungry sport like distance running or competitive

cycling like the Tour de France, huge improvements but I wasn't going to go there.

Co-host: That's an excellent segue to my next question. Speaking of the Tour de France, the most tested athlete probably in history is Lance Armstrong. There's a huge debate right now about whether or not he doped. Since you obviously have a pretty profound insight into this topic, do you think Lance doped?

Andrew: This sport has been around for over 100 years the sport of cycling and particularly long, long races like the Tour de France which go on for many, many, many days. That race is over 100 years old. That race began as a media event. That race began when newspaper men wanted to figure out ways to sell newspapers on the other side of France all throughout the summer so they created this race called the Tour de France which would go all around the country. It was a circus event. The people that raced in it they were victims and guinea pigs as much as they were athletes.

Back in the early 1900s nobody cared what these guys took in order to race the race. The newspapers got what they wanted. They got to report on this race happening all over the country. People bought newspapers to keep up with it and to find out what the other end of the country was like. Let's be mindful that the 1900s, early 1900s there were no planes, there weren't a lot of cars, people didn't know what life was like on the other side of their own country.

This race would unite people and give them an eye onto not only the races but their countryside. These guys took everything. They took whatever they could find. They smoked cigarettes. They took nitroglycerine, cocaine, amphetamines, heroine, strychnine. These were the early years of the Tour de France and the race grew up and the sport grew up and the sophistication and drugs grew up with it.

I find it really hard to believe no matter what any 2,3, 4, 7 people tell me they're trying to do in terms of cleaning up cycling that these drugs are not an enormous part of the sport. I don't know Lance Armstrong. I have no idea at the end of the day. I will tell you that he participated in a

sport that has a long institutionalized track record of performance enhancing drugs. The drugs have only gotten better. The mice and those would be the athletes and the teams that manage these athletes have only become smarter in terms of avoiding the cats and how to beat the cops in terms of being caught or not being caught.

Recently the guy who heads WADA, the World Anti-Doping Agency said that the very low percentage of people being busted for taking these drugs isn't because there are so few drugs in sport, it's because they are so bad at detecting them. This is the guy who runs the World Anti-Doping Agency.

For me to hear Lance Armstrong say that he's been tested over and over and over again means very little in terms of whether or not he's taken these drugs. I hope I've done something to answer your question. Sorry it was a very long answer to a very quick question.

Dave: You showed a lot of thinking about the problem in general there. As a citizen scientist, as someone who's interested in pushing my own capabilities there I look at Formula One racing. The technologies that are out there in those cars over the course of 10 years make it into the cars we drive which make them safer and faster and more efficient.

Part of me looks at things like competitive sports and I wish I just had a list of what all those guys were doing because we know some of them are doing things that are not supposed to do. If we just opened up the training journals and the experiments that they're running I feel like we would learn things about the way the human body works that no one knows because it's all secret. At the same time there's the argument that athletes would kill themselves and in surveys they actually admit they would to be top of their field.

I don't know how to optimize the answer to that but man, I want the data.

Andrew: Well, I would agree but I would disagree with you that all the time trickle down happens in terms of what professional athletes have used and what amateur athletes enjoy from both an equipment standpoint. I

mean we can ride the same bike that the Tour de France racers win on to the aerodynamic helmets they use in time trials, I mean the power bar was invented by elite distance runners. Gatorade was invented for elite football players.

Over and over again everyday, I should say every year we enjoy more the technology that elite athletes enjoy down to their coaching and the aforementioned power meters that I was talking about. 20 years ago power meters were utterly exotic items. The idea of training with them was not well known. Now, 500 bucks will buy you a power meter and 100 bucks a month will buy you a coach who can tell you exactly how to tailor your work outs to best work with those devices.

I would say that we constantly enjoy trickle down from elite athletics. I would also agree with you Dave that where is this all headed because I think that we want to emulate our heroes in always and I think that is right down to the drugs they take, right down to the testosterone that they use and perhaps the other drugs too although the T is the most accessible effective performance-enhancing drug to my mind. You might know more and you might beg to differ.

I would argue and worry about the idea of how far do we take this because you're right, athletes have proven before that they will take whatever it takes to win even if kills them and we've seen it happen. They've died in bike races. They've died on basketball courts. They've died in plenty of places unexpectedly and perhaps because of what's inside of them.

Dave: Most definitely. Well, I don't think we're going to get to the optimal solution here on the show today, but we do have time for the last question that we ask of all of the guests on the show and that's based on your life experience. What are the top 3 things that people might consider doing basically to be bulletproof in order to feel better, to have more energy, more power, across any domain you've experienced?

Andrew: Well other than get all the eat, sleep, exercise I would say be very curious about where the science is headed and be your own best advocate. Look at the hormone science. Listen to your doctor. Ask your

doctor, “Should I take supplements? Should I be on hormone replacement therapy? Am I old enough for that? If I should be, tell me the reasons why I should or shouldn’t? Are you going to monitor me if I do take this? If you’re unwilling to take me on to do this, can you suggest someone who else who might be willing to monitor me?” Again, you’re as healthy and as progressive as your own mind and curiosity allows you to be.

Dave: I really like that. It makes great sense. Thank you for answering that. Now, can you tell our listeners where they can learn more about you? We will of course include links on the website and in the show notes, but for people listening what’s your URL and the name of your book again and the relevant contact info?

Andrew: My book is *The Doper Next Door: My Strange and Scandalous Year on Performance-Enhancing Drugs* published by Counterpoint. It’s out in hardback. You can find it of course as an ebook as well. You can download it to any of the ebook technologies. You can find me on Facebook. You can find me on Twitter and those are the best ways to find me.

Dave: Excellent. Andrew, this has been a fascinating interview. I really appreciate you taking the time to share your experiences and to talk about your book today. Have a great afternoon.

Andrew: I really appreciate you having me on. Thank you so much.

Dave: If you enjoyed this we totally appreciate a positive ranking on iTunes. If you want to learn more about biohacking try following @bulletproofexec or just read our blog and we really appreciate people who sign up for our email list so we can let you know about new things that are happening and just keep the news flowing.

What We Cover

1. What prompted you to experiment with steroids?
2. How hard was it to find T, and where did you get the drugs?
3. What were some of the challenges you faced when starting your experiment?
4. What were this biggest unforeseen obstacles you faced during your doping year?
5. What were your biggest concerns before, during, and after the experiment?
6. How common do you think doping is in cycling, and sports in general?
7. What do you think of the efforts of people like Jonathan Laughers, Bob Stapleton, Allen Lim, and others who are trying to eradicate doping from sports?
8. Have you considered trying anything else?
9. What did your family think of your project?
10. Was it hard to end the experiment?
11. Did your exercise routine change once you began doping?
12. What was the most profound change you noticed when you started doping?
13. Was building muscle easier?
14. Did you ever experience “roid rage?”
15. What was it like after you stopped doping?
16. Did you ever purposely push the limits of the experiment to make the book more exciting?
17. Could you explain what second-hand doping is, and why it was such a concern?
18. Do you think Lance Armstrong doped?
19. Would you do it again? Do you have any regrets?
20. Did you suffer any negative repercussions?
21. Where can people learn more about you?

Links From The Show

Featured

[The Doper Next Door](#) by Andrew Tilin
[Andrew on twitter](#)



Food & Supplements

Upgraded Whey Protein
Bulletproof Upgraded Coffee Beans
ZMA
Magnesium Citrate (Natural Calm)
Hydrolyzed Collagen Protein
Zinc
Vitamin D3
Vitamin C
Glutamine
Acetyl L-Carnitine
Arginine
Kerry Gold Grass-Fed Butter
Grass-Fed Meat
Medium Chain Triglyceride (MCT) Oil
Glutathione
Rice flour
Mochi

Books

The Doper Next Door by Andrew Tilin
Sex, Lies, and Menopause by T.S. Wiley
Light's Out: Sleep, Sugar, and Survival by T.S. Wiley
The Better Baby Book by Dave Asprey

Gear

CES Machine
Pzizz. Pro
Light-Sound Goggles
Whole Body Vibration Plate
Digital Food Scale
HeartMath emWave 2

Listener Q & A Summary

1. Will a CES machine improve your quality of sleep?
2. How do you improve compliance with the Bulletproof Diet?
3. How bad are carbs for LDL cholesterol?
4. How do Whole Body Vibration Plates work?
5. How do you detox from marijuana?
6. Does arginine boost growth hormone?
7. How do you measure your macronutrients without counting?
8. What do oxidized fats do to your brain?
9. Do ZMA supplements work?
10. Is rice flour healthy?

Biohacker Report (latest studies & research)

[“Chronic Stress, Immune Dysregulation, and Health”](#)

[How BPA can cause heart attacks.](#)

[“Inhibitory effect of breast milk on infectivity of live oral rotavirus vaccines.”](#)

Updates

Thanks to you, Upgraded Whey has been a phenomenal success. As a way to celebrate, we’re giving everyone \$5 off if they order between now and March 1st of this year.

Questions for the podcast?

Leave your questions and responses in comments section below.

You can also ask your questions via...

[The Bulletproof Forum](#)

[Twitter](#)

[Facebook](#)

Listener Questions

Noah

First off I want to thank Dave and co-host for answering my questions on the podcast. I'm an athlete and have been looking into getting a CES machine in order to increase restorative sleep to help with recovery. I know that sleep hacking and athletics are generally considered to be a bad mix, but what if I'm trying to increase the quality of my sleep as opposed to reducing the time? Also, given that the aim is not to reduce total sleep time, does the caveat as to sleep hacking for adolescents still apply?

Andrew

Any thoughts on improving compliance with the BP Diet or its impact on performance? I've been cutting way back on carbs and sugars, but find it difficult to constantly do in social settings. How much of the benefits do you lose if you eat a carb heavy meal about 2-3x a week?

This post on Dr. William Davis' HeartScan Blog makes me think that even small cheat days could have a very big impact:

<http://www.trackyourplaque.com...>

Quote: "Once triggered by, say two slices of pizza, small LDL particles persist for 5 days, sometimes longer."

Randy

What is Whole Body Vibration therapy and why should I try it?

@_TLF

Please consider discussing Marijuana detoxification in a future podcast.

Payam

Could you do a blog or podcast discussion of the arginine before bed of boosts growth hormone idea? I would love to hear your discussion of the mechanisms and research on this. Including, but not limited to arginine before bed as opposed to after or before a workout. Thanks

Co-host answers:

Injecting growth hormone just increases water weight, which tricked some people into thinking it built muscle and caused fat loss. It doesn't.

<http://ajpendo.physiology.org/content/262/3/E261.full.pdf+html?ijkey=52412d739c04b9f120ffe4bce648bcc0b184935c>

Study in the journal of physiology found no improvement in overall strength for body composition despite small spikes of growth hormone after the different workout routines.

<http://jp.physoc.org/content/587/21/5239.full.pdf+html>

This was confirmed in a study lasting 15 weeks by the same researchers.

<http://jap.physiology.org/content/108/1/60.full>

Japanese researchers also found that despite higher levels of growth hormone spikes in one training group, there were no differences in strength or body composition.

<http://www.ncbi.nlm.nih.gov/pubmed/15574075>

When combined with arginine, the boost in growth hormone is far less than at resting levels.

<http://www.ncbi.nlm.nih.gov/pubmed/18090659>

Journal of medicine and science in sports and exercise found supplemental arginine had no effect on blood flow or arterial stiffness (neither central nor peripheral).

http://www.ncbi.nlm.nih.gov/pubmed/19276857?ordinalpos=2&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum

Arginine does cause a small boost in GH when at rest.

This is partially negated by exercise.

Small boosts in GH don't have any effect on muscle growth or fat loss.

Arginine is useless for fat loss or muscle growth.

It might be useful for vasodilatation and improving blood flow.

Jane

How are you supposed to eat 60% of your diet from fat without counting and measuring?

Ken

What are the actual cognitive and physical impacts of consuming oxidized fats?

Mark

What do you think of ZMA supplements? I've heard they boost muscle growth and they're one of the most common body building supplements.

Co-host answers:

They're useless, maybe even less than useless. One study published in the journal of the international society of sports nutrition found they only marginally increased zinc levels, and had no effect on fat loss or muscle gain. It also failed to raise magnesium levels to any significant degree.

<http://www.ncbi.nlm.nih.gov/pubmed/18500945>

Most of the claimed benefits are almost certainly due to partially fixing magnesium and/or zinc deficiency. Even then, you're much better off taking these supplements in isolation, rather than in ZMA. It's a complete waste of money.

Judy

I found your site only a few days ago, but have been totally engrossed in the podcasts and all the info you have to offer!

I've been trying to think of ways to adapt the bulletproof diet to my own preferences. My only hang-up so far is bread. I love the texture, and am trying to find a suitable yeast-free recipe using rice flour. What are your thoughts on rice flour, and are there any special considerations of which I should be aware when choosing a product?

Don't forget to leave a ranking in [iTunes](#). It helps more people find our show.