

## Best Exercises for Overall Health & Longevity | Dr. Peter Attia & Dr. Andrew Huberman

I've heard you talk before about some of the prime movers for longevity and all risks mortality Um And I'd love for you to review a little bit of that for us Um I think we all know that we shouldn't smoke because it's very likely that we'll die earlier if we smoke nicotine Uh I'm neither a marijuana nor a nicotine smoker So I feel on stable ground there But anytime we see smoking nowadays people want really want to distinguish between cannabis and nicotine Um So I am curious about any differences there in terms of um impact on longevity But in that context what are the things that anyone and everyone can do should do to to live longer Basically how long you got Well you tell me you tell me um I'd like to live to be I'd like my final decade to be between 90 100 I mean how long will we spend from now until you're 90 Talking about that There's a risk of that So let's start with a couple of the things that you've already highlighted So smoking how much does smoking increase your risk of all cause mortality and and the reason we like to talk about what's called AC M or all cause mortality is it's really agnostic to how you die And that doesn't always make sense I mean if you're talking about you know a a very specific intervention like a anticancer therapeutic you really care about cancer specific mortality or hearts specific mortality But when we talk about these sort of broad things we like to talk about AC M So you know using smoking smoking is approximately a 40% increase in the risk of AC M And what does that translate to in Um That means I'm I'm shortening my life by 40% It means at any point in time there's a 40% greater risk that you're gonna die relative to a non-smoker and a never smoker So it's important to distinguish it doesn't mean your lifespan is gonna be 40% less It means at any point in time standing there your risk of death is 40% higher Um And by the way that'll catch up with you right At some point that that catches up um high blood pressure it's about a 20 to 25% increase in all cause mortality Um You take something really extreme like end stage kidney disease So these are patients that are on dialysis waiting for an organ And again there's a confounder there because there's what's the underlying condition that leads you to that it's you know profound hypertension you know significant type two diabetes that's been uncontrolled you know that's enormous That's about 100 and 75% increase in AC M So the hazard ratio is like 2.75 Um type two diabetes is probably about a 1.25 as well So 25%

increase So now the question is like how do you improve So what are the things that improve those So now here we do this by comparing low to high achievers and other metrics So if you look at low muscle mass versus high muscle mass what is the improvement And it's pretty significant it's about three X So if you compare low muscle mass people to high muscle mass people as they age the low muscle mass people have about a three X hazard ratio or 200% increase in all cause mortality Now if you look at the data more carefully you realize that it's probably less the muscle mass fully doing that and it's more the high association with strength And when you start to tease out strength you can realize that strength could be probably 3.5 X as a hazard ratio meaning about 250% greater risk If you have low strength to high strength high strength is the ability to move loads at 80 to 90 It's all it's all defined by given studies So some the most common things that are used are actually you know they're used for the purposes of experiments that make it easy to do And I don't even think they're the best metrics So they're usually using like grip strength um leg extensions and like wall sits squats things like that So how long can you sit in a squatted position at 90 degrees without support would be a great demonstration of quad strength a leg extension Um You know how much weight can you hold for How long relative to body weight things like that Um You know we we have a whole strength program that we do with our patients we have something called the S MA So it's a strength metrics assessment and we put them through 11 tests that um are really difficult you know like a dead hang is one of them like how long can you dead hang your body weight stuff like that So we're trying to be more granular in that insight but tie it back to these principles If you look at cardio respiratory fitness it's even more profound So um if you look at people who are in the bottom 25% for their age and sex in terms of vo two max and you compare them to the people that are just at the 50th to 75th percentile Um You're talking about a two X difference roughly in um in in in the risk of AC M If you compare the bottom 25% to the top 2.5% So you're talking about you know bottom quarter to the elite for a given age Um You're talking about five x 400% difference in all cause mortality That's probably the single strongest association I've seen for any modifiable behavior Incredible So uh when you say elite these are people that are running marathons at a pretty rapid clip not necessarily it's just like what the VO two max is for that Like my vo two max would be in the elite for my age group Uh my vo two max you know but but again it's I'm I'm training very deliberately to make sure that it's in that So I wouldn't consider myself elite at anything anymore But I

still maintain a vo two max that is elite for my age I I consider you an elite uh physician and podcast and guy all around but true Um But in terms of OK so but the point is like you don't have to be a world class athlete to be elite Got it Um So maybe we could talk a little bit about the specifics around the training to get into that Um You know top two tiers there because it seems that those are enormous positive effects of cardiovascular exercise uh far greater than the sorts of numbers that I see around let's just say supplement a or something And that's you know like this is my whole pet peeve in life Right It's like I just can't get enough of the machinating and arguing about this supplement versus that supplement And I feel like you shouldn't be having those arguments until you have your exercise house in order Um You know you shouldn't be arguing about your this nuance of your carnivore diet versus this nuance of your paleo diet versus this nuance of your vegan diet Like until you can deadlift your body weight for 10 reps Like then then you can come and talk about those things or something Like let's just go with some metrics Like until your vo two max is at least at the 75th percentile and you're able to dead hang for at least a minute and you're able to wall it for at least two Like we could rattle off a bunch of relatively low hanging fruit I wish there was a rule that said like you couldn't talk about anything else Health related We can make that rule We don't want to listen to it I don't know about that We can make whatever rules we want we can call it eia's rule Now one thing I've done before in this podcast and on social media is just borrowing from the tradition in science which is it's inappropriate to name something after yourself unless you were a scientist before 1950 Um But it's totally appropriate name things after other people So I'm gonna call it Aia's rule until you can do the following things Um Don't talk about it Please refrain from talking about supplements and nutrition It is hereafter thought of referred to and referenced as Aia's rule I coined the phrase not him So there's no ego involved but it is now Aia's rule Watch out hashtag Atias rule Um Wikipedia entry Aia's rule in all seriousness and I am serious about that Um Dead hang for about a minute Seems like a really good goal for a lot of people At least that's our that's our goal I think we have a minute and a half is the goal for a 40 year old woman Two minutes is the goal for a 40 year old man So we adjust them up and down based on uh age and gender Great And then uh the wall set what's what are some we don't use a wall set We do as as just a straight squat air squat at 90 degrees Um And I believe two minutes is the standard for both men and women at 40 Great And then uh because for some people thinking in terms of eo two max is a little more complicated

They might not have access to the equipment or the to measure it et cetera  
Um What can we talk about thinking about in terms of cardiovascular So run  
a mile at uh seven minutes or last eight minutes That's a good question So  
there are vo two there are really good vo two max estimators online and you  
can plug in your activity Du Jour So be it a bike run or row machine and it  
can give you a sense of of that And I I don't reme I used to know all of those  
but now that I just actually do the testing I don't recall them but it's exactly  
that line of thinking Like can you run a mile in this time if you can Your vo  
two max is approximately this and and and and I think somewhere in my  
podcast realm I've got all those charts charts posted of like this is by age by  
sex This is what the VO two max is in each of those buckets We'll provide  
links to those who will have our people find those links And then um you  
mentioned dead lifting body weight 10 times I just made that one up We  
don't that's not one that we include but but something something like that Um  
We use we use farmer carries So we'll say for a male you should be able to  
farmer carry your body weight for uh I think we have two minutes So that's  
half your body weight in each hand Um You should be able to walk with that  
for for two minutes Um For women I think we're doing 75% of body weight  
or something like that Yeah great I love it Um As indirect measures of how  
healthy and we are and how long we're gonna live It's basically grip strength  
it's mobility I mean again walking with that much weight for for some  
people initially is really hard Um You know we use different things like  
vertical jump ground contact time if you're jumping off a box things like that  
So it's it's really trying to capture and it's it's an evolution right Like I think  
the the test is going to get only more and more involved as we as we as we  
get involved because it took us about a year Beth Lewis did the majority of  
the work to develop this Um Beth runs our strength and stability program in  
the practice and you know basically I just tasked her with like hey go out to  
the literature and come up with all of the best movements that we think are  
proxies for what you need to be like the most kick ass You know what we  
call Centenarian to Klete which is the person living in their marginal decade  
at the best