

The Three-Dimensional Definition of Fitness and Health

w/ Greg Glassman Early 2009

Transcript

[Greg Glassman]

This concept started with me having what I call a belief in fitness. That is, I was of the view—still am of the view—that there was a general physical capacity that would lend itself generally well to any and all contingencies: to the likely, to the unlikely, to the known, and to the unknown. A little different than the fitness that's required for, say, sport. In fact, one of the things that demarcates, delineates, and defines sport, physiologically, is how much we know about the physiological demands.

So, I look at a guy like this, Mr. Prefontaine (rest in peace). I don't think a 400lb bench press would have helped his efforts or made him a better runner. You understand that? And if you want to be in a bench press competition, I don't think training with him would have gotten you there either. But that's because he wasn't looking for broad, general, and inclusive fitness. He wasn't looking for a fitness that would prepare him for the unknown and the unknowable. Though hey, maybe that might have made a difference in his demise. Interesting bit of speculation.

But we were chasing headlong this concept of fitness as a broad, general, inclusive, adaptive capacity. Something that would prepare you for the unknown and the unknowable. And we went to the literature to look for it—and couldn't find anything. You know, and the stuff we did find seemed either esoteric, irrelevant, or logically flawed. Scientifically flawed, even. Some of the stuff that came from the best scientific minds to date—the American College of Sports Medicine—cannot give a scientific definition of fitness. They give a definition for sure, but it contains nothing that can be measured. And scientific definitions that include unmeasurable things are not scientific. Though it may look like it, and could have all kinds of words like "neurosynaptic facilitation"—I mean, you can really get fancy with the language and throw some Latin at you. But if, in the end, it's not measurable, you don't have a good definition.

So, we started playing with it and came up with three operational models, and you'll see what they are. They were kind of clumsy, but they had utility, and they guided us, kept us on this path. And I'll share with you what they are.

Jim Cawley and Bruce Evans of Dynamax, they make these med balls over here. Poor guys have gotten completely sidelined, but still, it was a big contribution. It's a great med ball. In their prime, in their days of vigor and vitality, they produced a list of the physiological adaptations possible through an exercise program. This includes cardiorespiratory endurance—you can get these from the "What is Fitness" article, you needn't write them down. I just want you to get an overview of what we're talking about. They listed these 10 general physical

skills, they called them, and really what they did is they represented the gamut of potential adaptation—physiological adaptation—to an exercise program.

That is, you can improve cardiorespiratory endurance, stamina, strength, flexibility, power, speed, coordination, accuracy, agility, and balance. Ten. They gave reasonable definitions to each of these ten so that they seemed fairly distinct. A couple of notes here: Nature has no obligation to recognize these distinctions. It's completely man-made. This is an abstraction, a construct, a model made by a couple of coaches and exercise physiologists to help us understand fitness better.

Well, what we did with this, that was a surprise to the guys that came up with the list—they had one of those "damn it" moments, where they wish they had taken that next step, let the other shoe hit the ground, if you will—was we said that he or she was as fit as you were developed in breadth and depth in those ten capacities. And to the extent that you were deficient in one relative to any cohort, that is, the guy standing next to you, you were less fit. Simple. This is a balance, a compromise if you will, of physiological adaptation.

The second model.

This is kind of a statistical model based on training modality. Here's what we're going to do. I'm going to take a big hopper—you know, like the ones they use to pick a lottery winner? Throw in all the cards and envelopes, turn the thing, and pull out your winner, right? You've seen that before. What we want to do is load this thing with as many skills and drills from as many different sports and strength and conditioning programs as you can come up with. It could be B-skip drills from track, agility ladder work from football, a one-rep max bench press, or even "Fran," "Helen," and "Diane" from the CrossFit workouts—any of our hero workouts. (Those are all CrossFitters that we lost.)

I'll even throw in Pilates and some yoga if you want. I don't care—I'm not going to exclude anything. The more, the better. Fill it up. Now, line everyone up, turn the crank, pull something out, and put it to the test—give it the Pepsi Challenge. Here's the contention: he or she that performs best at these randomly assigned physical tasks is the fittest.

And it may very well be that the fittest man on earth is about 75th percentile in terms of whatever you pull out of there. You understand? In fact, being the best at many things would tell me immediately that you're not as fit as you could be. For example, let's say you have a four-minute mile. I'll tell you, I know thousands of people who are a whole lot fitter than you are. Because part of the adaptation to get a four-minute mile is that it probably coincides with a max bench press of about half your body weight and a vertical leap of three to four inches. When we get under four minutes, it's especially true. It's absolutely certain.

Now, if you've got a 900-lb back squat, I can tell you that you probably walk funny, can't run well, can't jump on boxes too easily, and would be hard-pressed to run a mile without stopping four or five times. That's just how that is. It's not a character flaw; it's part and parcel of the adaptation. Now, if you tell me, "I'm living for a 900-lb back squat," great! I'm all for it. I can put you in touch with Dave Tate; he'll get you there. Mark Rippetoe can probably get you on your way. You want a four-minute mile? We've got people that can help you move in that direction.

But you are not advancing your fitness by doing so. What you're doing is advancing a very narrow band of specialized capacity. No value judgment here.

So we have a statistical model where we're looking at skills and drills. And what I'm talking about is balance and compromise with breadth and depth of capacity and breadth and depth of training modality—different skills

and drills. The other one—the first one, if you remember—was this balance of adaptation, physiological adaptation.

I've got a third one. There are three metabolic pathways. Turns out there's a fourth, and someday there will probably be a fifth, sixth, and seventh. We fundamentally don't care. But you put power on this axis, and duration of effort here. The first pathway looks like this; the second one looks like that; the third one looks like this. The real point here is that this is a high-power effort, about 100% of max human output. The second one is probably about 75%, maybe 70%—authorities differ. The third one is about 40%. The first one craps out at about 10 seconds, the second peaks at about 60 seconds, and the third terminates at 120 seconds.

And this long one starts real low and doesn't fade in any reasonable time for which I have patience or interest. So I have—and these are engines—these are engines that produce ATP. ATP is the currency of all effort, of all energy output. It doesn't really matter—high-powered, short-duration; moderate-powered, moderate-duration; low-powered, long-duration. Yes, they have names: phosphocreatine, or phosphagen (go ahead and forget it, you'll be better off if you do), lactate or glycolytic, and oxidative or aerobic. These two are anaerobic, and this one is aerobic by definition.

Forget it all. Guess what? Our thought is that you are as fit as you are balanced in capacity in all three of these engines. The human being is a vehicle with three engines on it. Let's get them all working. Does that make sense? How crazy is that? Simple. And you tell me, "No, there's a fourth." I'll say, "We'll work that one up too." How about a fifth, sixth, or seventh? I'll say, "No, forget them." Let's get them too.

It turns out we were likely maximizing the output of a pathway no one knew existed. How? Through constantly varied, high-intensity functional movement. If you want to remember something, remember that: constantly varied, high-intensity functional movement. The workout of the day (WOD) on the website is nothing but an example.

So, breadth and depth—balance in bioenergetics, in the biochemistry, the engines that fuel all human activity. By the way, you're all in one of these states right now, and all three engines work all the time to some extent. They're kind of cool—they idle, others rev. They rev, others idle. Two will rev, one will idle, doesn't matter. But right now, you're using one of these dominantly: oxidative. The key is sustainability.

Are you doing right now something you can only do for 10 seconds? I hope I'm not that boring! But you know, you're probably thinking, "No, I can go a little longer than 10 seconds, Coach." Could you do it longer than two minutes? I think I've already proven you can, because everyone's still looking, no eyes closed. So right now, you're doing aerobics. Is that cool? You get really fit this way, right?

Okay, so balance in physiological adaptation: coordination, accuracy, agility, balance, stamina—you got it. Balance in the skills and drills from sundry sports—throw them in, turn the crank, pull it out, statistical kind of game. Balance in bioenergetics, in the molecular mechanisms that create all activity—sleeping, eating, fighting—it's all there. We don't even need to know how many engines there are. We just want them all balanced. And then we move forward, and we launch the workout (WOD), put it on the website, and use these three operational models.

And they're operational, and therefore kind of clumsy, but they had utility. They kept us on track. Let me give you some of that in the hopper model: turn in the crank, pull something out. Check this out. We all know, when you line up and there you are, facing the crank as it turns, everyone here probably knows what it is you don't want to see come out of the hopper. Got a sense of that? There's something where you're like, "Oh, that would suck!" And there's probably something too where you're like, "Man, this would be a great one." But if you're like

everyone else, and you're standing there, the crank is turning, and you're saying some kind of silent prayer, "Dear God, don't let it be..." There's something you just don't want to have to confront.

Here's what I've learned about fitness, about sport training, about preparing yourself for the unknown and the unknowable: there is more traction, more advantage, more opportunity in pursuing that thing that you don't want to see come out headlong than putting more time into that thing you're already good at. That thing you don't want to see come out is a chink in your armor, and addressing it will make a difference for you in ways that you'll never be able to predict prior to the experiment. Never.

We have countless examples of this from amateur and professional sport. Really, the heart of this is that we've learned some things about GPP (General Physical Preparedness) that the world never knew before.

Someone's taking notes, so I'm going to just run with that a little bit here and give you some fuel on this. There is more opportunity to advance athletic performance in advancing GPP—beyond whatever you think its current state is—than there is in more specific strength and conditioning training specific to the sport. I don't care who you are. You could be an eight-figure ball-sport megastar, UFC champ, or the guy next door. There is some significant, glaring deficiency in your GPP.

Just to give you a clinical sense of this, it will take me, at most, two hours to find it. Two hours. I guarantee I'm going to have it nailed down and be able to confront you: "Look, dude, relative to other people at your performance level, this is something you suck at compared to them. I don't care who you are." Fixing that will give an advantage where it doesn't make sense, maybe mechanically or metabolically.

Why do more pull-ups make for better skiers? I'm not quite sure. We've got some theories, but we've demonstrated it's a fact. Do we need to know the "why" of it, the actual mechanism? Not really, because I'm in the business of just advancing performance.

So, we've got these three models: we're doing constantly varied, high-intensity functional movement as an attempt to stay true. These are more like lighthouse guideposts, you know, litmus tests for us than anything else. And we're plugging along, doing WODs, collecting data, and started analyzing this data—looking at it.

What does it really mean to do Fran? What does it really mean to do Helen? What does it mean to say that your time went from seven minutes to six minutes to five minutes to four minutes? Some interesting things kind of came out of this.

Now, work is Force times Distance divided by Time. I apologize—just a little bit of algebra here. Maybe I shouldn't have even said that word, but don't let it scare you. Force times distance, divided by time. Essentially: what does it weigh, how far did you displace it upward, and how long did it take?

Now, functional movements—this prescription here, constantly varied, high-intensity functional movements—are defined as well as by any other definition. They have a unique capacity to move large loads long distances and quickly. They are singularly unique. And this, by the way, turns out to be Power.

Now, in a workout like *Fran*, does anyone know what that is? Show of hands if you do. Look, here's a thruster: I front squat, drive 95 lbs overhead—that's one rep. Do 21 of those, then 21 pull-ups. Basically, 21 times, chin over the bar. Anyhow, the kip is the most efficient way to do that. Alright, 21 pull-ups. Then go back and do 15 of the thrusters, 15 of the pull-ups, 9 of each, stop the clock, and we get a time for it.

So, the work required for Zach to do Fran (W_{ZF}) is constant. It doesn't change unless your height changes, the distance you travel changes, your weight changes, or the barbell weight changes. But as long as you stay your

current height—what are you, 5'8", 5'9"?—as long as you stay 5'10", your weight doesn't change, we stay at 95 lbs, and we don't change our standards for range of motion (and we do not), then every time you do that workout, the work is constant.

So, we do it the first time, and we get some Time 1 (T_1) for it. And if we do it again at another date, I've got the same work (W_{ZF}), don't let this scare you, and I get a second time for it (T_2). Now, if I go to divide these—if I want to compare these two—check this out:

 T_1 divided by W_{ZF} of some T_2 . You guys remember how to do this? We take the denominator here and flip it, right?

 W_{ZF} over T_1

Now I have

 T_2 here and W_{ZF} here.

These are the same and they cancel. Now, suppose there was some error, and there will be. We know about it. Those of you who have a math or physics background, you know that as long as the work is constant, any error inherent to our methodology of measurement is consistent. And how are we doing this? I'm measuring the weight with a scale, the distance you travel with a tape measure, and the time with a watch.

There's really not a lot of error there. But there are some interesting things because we're calculating the body's displacement by looking at the center of mass, blah, blah, blah. It's zero-order error. It's constant error. The error that is here is here when I do it the second time. But what happens when we go to look at the math? The work and its error cancel out, and the ratio of the second time to the first time describes my progress to the accuracy and precision of the watch—which is really enormous. It's the best of my tools; it's better than my scale, better than my ability to use a yardstick—it's time, it's the watch, it's easy.

So, what are we looking at here? Well, we're looking at changes in power. We didn't have to study this much longer to come to this understanding: if I put Power on this axis and Duration of effort here, and say we take a handful of efforts that take approximately 10 seconds to do and measure their power output, we get an average. I can do this at 30 seconds, and I can give you examples, but it doesn't really matter. We can keep playing this game, getting these data points, and then graph this thing.

What I've done here, technically, mathematically, with adequate scientific accuracy and precision, is I have graphed an individual—or I can do this with a company, a group, a battalion, platoon, or country. I have measured work capacity across broad time and modal domains.

By the way, this Power is work capacity. Here, we'll draw it again. Pull it out of the rubble here. Power equals Force times distance divided by time (P = Fd/t). Work, that's Work. Per unit time. Work capacity, Power, is work capacity. I have a measure here of your work capacity across broad time, from short duration to long duration, and modal—doing a bunch of different things at each duration, at each time limit. I have measured your work capacity across broad time and modal domains.

What this means is that the area under the curve gives me a scientifically accurate and precise measure—scientific measure—valid measure of an athlete's fitness. And we're the first people to have ever done that. The first people to ever have done that.

Now, I've got exercise physiologists scratching their heads, calling it dangerous. And you know what? It is dangerous because it messes up their position in the market. They're calling me an idiot, but I don't have anyone out of exercise physiology refuting this.

What's interesting is when we show this to physicists, chemists, and engineers, you know what they say? They say, "Why, of course. There's no other way to assess the capacity of something, be it a rocket, motorcycle, truck, Humvee, or tank. I want to know how far it moved, what it weighed, and how long it took."

And it turns out that everything else is derived from that or is entirely irrelevant, like whether it's blue or green. We don't care. You with me?

Now, something else happened here along the way in playing with these three models: turn the hopper and pull out skills and drills, balance these ten general physical skills so that you have balance and breadth and depth in capacity—cardiorespiratory endurance, stamina, strength, all of that. And the balance of the molecular approach here, we observed along the way something that was kind of a curiosity at first. In the original What is CrossFit? What is Fitness? document—that has been kind of a capstone CrossFit document and brought a lot of people in—we had observed as kind of a curiosity that there was a continuum between sickness, wellness, and fitness.

We had observed that if I could quantify any measure—if it was truly a measure that I could put numbers to, and something that would be of interest to, say, a physician or an exercise physiologist—what we'd find is it would sit well-ordered on this pattern. Let me give you examples.

Let's look at body fat, okay? You understand that if you're 40% body fat, that's considered pathological. You've got a problem; you're morbidly obese. There are some numbers floating around, I don't know what they are—15%, make it up—every community seems to have a different one. That's "well" or "normal." Five percent is more consistent with what you'd see in an elite athlete.

Bone density—same thing. There's a level of bone density that is pathological, it's osteoporosis or osteopenia in the early stages. There is a value that is normal, and they say, "Yes, you have normal bone density." We find gymnasts with three to five times normal bone density.

I can do this with resting heart rate, with flexibility, with all of the 10 general physical skills. Even some subjective things, where we can put numbers to it through analytical methods, like mood state. There's a sense of well-being that's normal, and athletes are a different breed altogether. They kind of hang out with a Superman complex, and then there's the depressed.

I do not know of a measure, even something loosely obtained through subjective, kind of analytical, psychological methods—I do not know of a metric that runs counter to this. This led us to believe that fitness and health were varying, different measures of the same reality. It suggested that rather strongly.

And so we were on a road lecturing and we're dealing with these three operational models, and this fourth curiosity. Weren't sure what this fourth piece, what its significance was or not, but we did understand this.

If there's anything in your lifestyle, in your training regimen, or in your recreational pursuits (take that broadly)—if there's anything in your life that has one of these metrics moving in the wrong direction, I want you to seriously entertain the possibility that you're doing something profoundly wrong.

What we find is when you do CrossFit—when you're doing constantly varied, high-intensity functional movements and eating meat and vegetables, nuts and seeds, some fruit, little starch, no sugar, and getting

plenty of sleep every night—we don't have this specter of what we call "side effects." We don't have, "Wow, everything's getting great, but this one value is just going in the wrong direction, and quickly."

That is not the exception, but it is the rule when it comes to medical intervention. Your physician might have a plan for your body fat, but it might reduce your bone density or your muscle mass. It may be that your doctor has a solution to your cholesterol problem, but the drug gives you a stroke. It happens—it has happened, and it still is happening. And we didn't see that phenomenon in CrossFit.

We didn't see, "Wow, everything's been great except this one thing went to shit since we've been working with you." Never saw that. So, we knew there was something significant here. We knew this could be kind of another test in assessing what you were doing.

I was watching Pat Sherwood struggle with the presentation of this in Brooklyn back in November. He was doing a brilliant job, but as it was coming, I thought, "Man, this is the part I hate—trying to explain how these three models interface with this fourth bit." This was important enough to us, again, because it showed that fitness and health seemed to be varying degrees of the same reality—not different facets, but just different measures: lousy value, good value, and excellent value.

We didn't want to get rid of it, but we needed it in there, and it logically tied in. We weren't quite seeing it, but we were going on with this, and I was watching him hit this thing, and all of a sudden, it came to me in a flash. And it looks like this:

(Here's the part where I apologize if this gets technical—it might be here, but the problem lies with me, not with you. I'm going to try and draw here)

So, we've got this fitness curve. Remember? We've got Power on this axis, and I've got duration of effort here. And we made the claim that this curve here would represent your fitness, right? Well, check this out. If I add a third dimension here, and the real measure of this is, "Do you see 3D?" Get the corner of the room there. You got that? We're looking at the little corner, and what I'm going to do is this: forget this line—you don't see it. It's just going to help me do something.

Now, can you see that? Can you see that I've produced a solid, coming down and forward out of the corner? Good! Good, because that's not a beautiful graph, but it ain't bad either. But hey, it's worth something, entirely dependent on those of you who go, "I see 3D," and then I'll say, "Well, that's a good one."

Here we are. Look, this is fitness. I'll just let us work back into that. I don't want to hang out in the third dimension too long, make anyone dizzy. I'll come back here to two-space. This is fitness. Let's look at some of the things that the exercise science community has looked at.

Let me tell you a problem with exercise science. It is very, very rarely scientific—at least that would meet the rigors of anyone who's actually studied real science: chemistry, physics, engineering. And it is almost never about exercise. Isn't that interesting? So, exercise science is neither science nor about exercise.

Now, let's look at the things that that crowd looks at. One of them is VO2 max. I'm going to tell you right now: if you hear anyone talk too much about VO2 max, they're very likely not doing science and don't understand exercise. That's just a fact. It's a dead-end bullshit thing. VO2 max, lactate threshold, and even things like strength—here's what I'm going to tell you.

These things are correlates, maybe components, but they are absolutely, positively subordinate to what happens here—to this curve. To wit: who would take an increase in VO2 max for a decrease in work capacity

across broad time and modal domains? Let me tell you what that translates to: when we hook you up to the tube, pinch off your nose, and run you on a treadmill, you're using more air than you ever have before. But you're going to lose the race.

Lactate threshold: "I'm going to improve your lactate threshold, but you're going to get choked out in your fight because of a lack of work capacity."

Is that a good deal? Okay, if you're winning, if your performance is there, if you can demonstrate high levels of fitness, I don't really care about these things.

That being said, let me tell you what we've been doing at CrossFit. By using constantly varied, high-intensity functional movements designed to elicit a broad, general, inclusive fitness—a fitness that would protect you from the unknown and the unknowable—by looking at a curve like this, what we found is that we have made very significant improvements in these things, in almost every athletic community, without ever looking at them.

Without ever looking at them! And I can make a list of hundreds of these metrics. No one has ever produced a great athlete by taking those things one at a time and building back up to something that looks like an athlete. It doesn't happen. It doesn't work that way.

The only place that works is in universities, avoiding athletes and coaches with tremendous effort, getting a bunch of silly little bullshit degrees—generally non-science degrees—and feeding off the public trough. It'll work there, but not in the real world.

[question] So, those can all be components?

They are correlates—that is, somehow connected by mechanisms not understood. Or they are components, essential, but the bottom line is they are subordinate. I'm not going to develop fitness by advancing them.

So, we're not measuring those things. I'll let those guys measure them and go, "Oh, how are you doing that?" You know, they tell me they're important. I say they're not, and then they find out that I can move them better than they can. I can move them best by working constantly varied, high-intensity functional movements. Doing things that look like *Fran*, *Diane*, *Helen*. Turning fitness into sport by working with fixed workloads and trying to minimize the time, by making every workout a competitive effort among a cohort.

When I do that, what we find is that these metrics do spectacular things. But forget them—I don't care. What happens is I'm maximizing the area under the curve.

Now, let's go back to 3D. Here's the shocker. This piece here is fitness. This, here—now I hope you see—is a three-dimensional solid. That's health.

It's health.

And I have the same relationship to things that seemingly matter, like HDL, the good cholesterol; ejection fraction—how much blood the heart can empty with each pump.

I can play this game all day long with just about anything that the doctor will tell you is important to your health. What we find is that we can get the hypothesis here—my belief—is that we can maximize this volume by maintaining our work capacity across broad time and modal domains through the ages as you get older and older and older.

And I can play the same game. I can ask: Are these things just correlates? Are they components? And are they indeed entirely subordinate? There's a compelling body of evidence. It is my belief—my thought, I think, where we're headed—and right or wrong, this still needs to be measured. I want you to understand that: it still needs to be measured.

But I'm of the opinion that this health—that this volume—will be maximized by maximizing your area under the curve and holding that work capacity as long as you can. In other words, eat meat and vegetables, nuts and seeds, some fruit, little starch, no sugar. Learn and play new sports. Do CrossFit, in 100 words or less. Do constantly varied, high-intensity exercise throughout your life, on a good diet, and that will buy you more health than will trying to "fix my cholesterol" or "improve my bone density."

And likely, the medical approach here would be pharmaceutical intervention. So, "I'm going to take a drug for my cholesterol, I'm going to take a drug for my bone density, I'm going to take a drug for not sleeping well," and I am of the opinion that it's a failed approach, much as focusing on individual fitness components is a failed approach.

It makes sense to me that if I'm really interested in maximizing this solid, I would take the two-space model—work capacity across broad time and modal domains—and hold it as high and for as long as I can.

But let me ask you this: Suppose you think good cholesterol is really important—HDLs—and you want your HDLs up. Suppose I had a guy who, at 90 years old, has 65% of the work capacity he had when he was 25, which was also in the top 5 percentile of all people his age. And now, at 90, there's not one in a thousand your age who's like that. In other words, here you are at 90 years old, running up and down steps, successfully engaging the ladies, and if someone tries to take your wallet from you at the ATM, you're going to mess them up.

Now, at 90, you've got a picture of the guy, okay? Suppose I tell you, "Yeah, but he's not in good health because his HDLs aren't high." Would you, right there and then, say, "Hey, I tell you what, man. You can have my wallet, my dick won't work when I meet the ladies, and I need help getting up and down the steps—but my cholesterol is beautiful!"

Do you want that deal? Of course you don't.

Of course you don't. I can even look at longevity, just the single axis here, and ask, is the goal to live forever, or is the goal to maintain as much functional capacity for as long as humanly possible?

Theodore Dalrymple—he's an editor for *The Wall Street Journal* and a physician, that's a pseudonym—says that the overwhelming majority of the increases in longevity that have occurred over the past few hundred years, modern medicine can take almost no claim for. He says that almost all of it can be attributed to hygiene and sanitation.

He also says the way forward, the big gaps, the big improvements in longevity, are not going to come through pharmaceutical intervention, not through surgery. The M.D.s aren't going to provide it. He says it's going to come through fitness. That's what's going to do it. He's looking at exactly what we're looking at from a very different perspective, from the perspective of a physician who's in a great position to understand what's deficient in trying to take pharmaceutical intervention to fix these components or correlates, these subordinate measures, and think you're going to build back up to a good life.

If I look at longevity alone, you know, there's an instant problem here. Can you imagine if this curve, this blanket as it were, if it goes way low, so you never have any work capacity, but it stretches out to 200? Is that a life that any of you want? You know, I'm not here to say yes or no. I'm not here to say that. What I am saying—I'll tell you

my personal view—is a resounding "No." But you know, that's for everyone to determine. That's a normative kind of thing; we're not talking science when we're talking about that.

But let me tell you this: it is imperative, it is essential for doing science, for making meaningful assertions, that it be measured this way. The metric is important, not the outcome you'd like to see. I have this fear that someday medical science is going to get average life expectancy to 150. But at 75, you go into a nursing home and they're wiping your ***, feeding you with a spoon, and you're watching *Oprah* all day long for 75 years. That, to me, would be like dying at 75 and going to hell.

And you know, if someone wants that, there will probably be a time and place where that can be arranged, but it's not what I'm looking for. And it's really not what CrossFit is about. This is about vitality, it's about capacity, capacity, capacity. What can I do? Getting things done.

And what would that be? Stop someone from taking my wallet at the ATM, successful engagement of the ladies, and being ambulatory. I want to go up and down the steps, man, without help. What we have here is a unification of fitness and health. It was hinted at by this continuum—remember the values? Everything sat well-ordered, where the normal or well values sat between the pathological and the fit.

By the way, that continuum also tells me something else: If you are fit, you have a whole bunch of qualities—blood pressure, cholesterol levels, bone density, resting heart rate, body fat—that, before you can become pathological, you will have to pass through wellness. It tells me that fitness is a hedge against sickness, with wellness as an intermediate value. That's how profound it is.

Questions?

Now, the exercise science community, those people neither doing science nor exercise, they are of the view that these are entirely different worlds that cannot be bridged, cannot be unified. Look, whether there's fruit to it or not, I'm going to tell you right now, here's a metric that proves otherwise. What significance comes of it remains to be seen. But if we are going to develop a science of exercise—and CrossFit is leading the world in that—if we are going to do this, I believe we've got it.

We've got more scientists, PhDs, MDs, trainers, coaches, athletes, and more money and greater reach than any organization in the world today studying fitness, doing fitness.

Questions?

Stunning, huh? Nothing? How about lunch, is that next? Am I done? OK, alright.

Thanks for your time, guys. Thank you.