

Mark Rippetoe on making gains in your 40s and beyond

Mike Matthews: Hey, it's Mike. In this interview, I talk with Mark Rippetoe who really doesn't need any introduction. If you are familiar with the fitness world and all, you know who Mark is.

He's the author of several best-selling books. The most well-known and the most popular book is "Starting Strength," which is a barbell program that probably 50 to 70 percent of the people that I speak with, that read my book and get into my work, have also read Starting Strength. Most of them have also ran the program.

It's a great program, especially for beginners for building that initial foundation of strength and getting the muscle growth going and so forth.

Mark is obviously very, very knowledgeable. He's worked with, I don't know how many thousands and thousands of people, including elite athletes, Olympic athletes, so he has a unique insight into not just what it takes to get into shape, but what it takes to really get into the elite level of performance and getting an elite type of physique. Even though physique is not really his thing.

He is more of a strength coach, but of course, he understands, that in terms of physique, really all we're talking about it getting big, getting strong, and then getting lean. The whole getting lean and getting shred thing, he thinks it's funny. Not that he doesn't know how it works or how to do it, but he's more focused on how do you get big and how do you get strong.

With that, let's get to the interview. Mark, thanks again for taking some time to talk with me.

Mark Rippetoe: Anytime, Michael. How's things?

Mike: Busy and busy, but I can't complain.

Mark: Did you get big yet or not?

Mike: [laughs] That's funny.

Mark: That's not funny.

Mike: I got so much flack from people from that last one like, "Mike, when are you going to gain your 30 pounds, right now?"

Mark: Mike, why don't you get to be 215 and ripped, and then that'd be better.

Mike: Honestly, I don't think, I'm 190 right now, 189.

Mark: That's 25 pounds.

Mike: I know, 25 pounds.

Mark: Let's say your body fat goes up three percent, that still puts you at about, what, eight?

Mike: No, I'm about seven to eight right now.

Mark: Seven to eight is stupid.

Mike: It looks good though.

Mark: It's just ridiculous.

Mike: It feels good.

Mark: That's a level of obsession with this body fat thing that's just not psychologically healthy. You and I'll talk about this off the air.

Mike: [laughs] I can understand where you're coming from, but you might be surprised with how I'm very flexible with how I eat, and I don't have a bunch of head, whatever stuff. Part of my world is to walk the walk, and the people generally are reading my stuff and reading my books and following me, they want to look a certain way. They want to be leaner...

Mark: I know, I understand, aesthetics.

Mike: They would sacrifice some strength.

Mark: There's a market for that, and you're in that market. I'm in the other end of the deal.

Mike: Exactly. Anyway, that's another conversation. In this interview, what I want to do is I want to talk about training for people when they start getting into the middle-aged years because I get asked about it a lot.

A lot of guys especially, and girls actually and women, in their 40s and 50s and beyond are worried that it's almost too late to get into shape. If they didn't do it when they're in their 20s, can they really do anything.

In terms of guys, most guys that have this concern, they think that they can't really build any real muscle to speak of, and that their hormones are all messed up now and they won't be able to get lean. You obviously, with all your years of experience, what have you seen in terms of, what can guys and men and women in their middle age years expect?

Mark: Let's first define middle age years. It's been my experience that you have a relatively normal novice training response up and until you're in your early to mid-40s. In other words, there's not that much difference between a 40-year-old guy and a 30-year-old guy in terms of how he responds to training, what constitutes too much volume, and that sort of thing.

You take a guy that's just starting out, and he's 40 years old, just put him on a regular program, just like we normally talk about. He can go three days a week. He's probably going to have to be a little bit more careful about getting enough sleep, but he can handle the three day a week volume. He can handle the normal novice progression as we describe it in our books without any real alteration in volume load.

As a general blanket rule, here's the deal. The older you get, the more sensitive you become to volume, to number of reps in a workout.

Mike: Would that also then apply...

Mark: This means that a guy that's 60 years old is probably not going to be able to do three sets of five across three days a week, he could go two days a week. This is why we find that older people are more sensitive they just can't recover from all of the reps.

Mike: If we looked at it on a weekly or we are looking at 15 sets per week on a major muscle group, you have seen that...

Mark: 15 work sets.

Mike: Yeah, 15 work sets, that's 15 heavy sets.

Mark: Let's say for instance, it's going to be nine probably. While you are 60 years old, we're talking about six work sets a week instead of nine. I've seen a lot of people go through this process. What strikes me as being the constant across all masters training, this is men, women, everybody. You have to curtail the volume which means that a master can deal with the intensity.

Mike: That's it, just to clarify this.

Mark: The heavyweight is fine, that's not the problem, the problem is do you want a bunch of sets with the heavyweight. I personally, for instance, right now I'm just trying to stave off death with my training. I squat one heavy set of five once every two weeks.

Mike: You are able to maintain with that.

Mark: Yeah, I can maintain with that. In fact I make a little progress every once in a while. I'll pull heavy once every two weeks. Last night I Deadlifted at 435 for 5 and it was easy. It's going to take me a while to recover from that, which means that I'm going to be more sore than I would have been 20 years ago.

It's going to affect my other training more than it would have 20 years ago. I've got to wait a little bit longer between now and any more lower body work, any squats or deadlifts.

I have found that once...I alternate Mondays, every other Monday it would either be heavy squats, heavy pulls, I don't do any other stuff for those movements except once a week. I'll pull heavy about twice a month, I'll squat heavy about twice a month, that's enough. If I try to go up in volume, every once in a while I'll forget everything I know, I'll try to go up in volume, I add another, well I can get away with it.

Mike: Even if it's in a higher rep range?

Mark: That's right, especially if it's in a higher rep range. Let me say that again, especially if it's in a higher rep range. This is my point, sets of 10 for guys my age, for masters guys are not a good idea even if it's only one set.

Mike: Even if it means like going somewhere approaching failure as opposed to taking 50 percent of your one rep max it's like getting a warm up.

Mark: 50 percent of your one rep max is not...

Mike: Yeah, it's not enough. It's not even a set of load.

Mike: Exactly.

Mark: A set of can load would be 70, 75 percent of one rep max, 78 percent of one rep max, somewhere in there. 50 percent of one rep max and warm up set doesn't really do anything.

Mike: Yeah, that's what I mean because a lot of people do some of those.

Mark: Work weights for sets of 3, 5, 10, you can get away with triples and fives when you are older. You can get away with perhaps a couple of triples, three triples across, maybe. When you get to where you are handling sets of 10, it's going to bother your knees, it's just going to make you sore, the inflammation didn't go away as fast.

My advice to older guys is to hold it down to sets of five, and try to use as few as few as sets as you possibly can to get a training effect. You'll be less sore, you'll sleep better at night, you won't tend to accumulate tendonitis, your life will just be more pleasant while you are training

If you overestimate your recovery ability, then you will have not good luck with this. Your recovery ability is best taxed by a barrage of volume. Don't do 20's. Don't do 10's. Hold it down to five.

Mike: Man, I've found that stuff rough even when was in my early 20's. Trying to do everything twice a week. Trying to do all these volume and training to failure all the time.

Mark: Right. Volume is training to failure all the time. Whole bunch of volume. Five sets of five across. That's a young man's deal. Older guys, you're not going to have good luck with that. In fact, what we find is that when we put older guys on a linear progression, where we come in, test them the first day, three sets of five across. Second workout of the week, go up five pounds, they will get away with that for three or four months. They'll grow up, they will grow stronger.

But, they're going to peter out on that linear progress pattern a lot faster than the younger guy will. If you go more than the first month, doing three workouts a week instead of two, you're going to get burned out. It's just too much to recover from, especially for an untrained older guy. Recovery is trainable too. Your ability to recover will...

Mike: Improves over time.

Mark: ...improves over time, and that's even true for an older guy. But, there reaches a point of diminishing returns on that, faster with older guys than with younger trainees. My advice to older people is to just...if you waited till you're 58 to start working out, you've fucked up. There are consequences to that.

You cannot make as fast a progress as you could have, if you have started doing this when you were 19, 20 or 21. You have to admit that you're not going to approach your potential as closely as if you had started when you were younger, with a better hormonal background to help you with your recovery.

All that stuff is gone. It's all gone. I'm sorry, it's gone, you're not a kid. You can't pretend you're a kid. There's a price to be paid if you do. Hundreds of reps of anything for an older guy, that's just hospitalization. It's not a good idea.

Mike: I've run into a few guys in their 50s, friends of mine that started with CrossFit, even though I told them not a good idea. Especially if he's got into weight lifting the first time in their late 40s or 50s. Two in particular, one got hurt. The other one, it wasn't a bad injury. He was having nagging pains. He was approaching injury.

Now, he got out of that. He's just coming with me in the morning. He's back to just, what you're saying, heavy lifting. He's doing about nine to 12 sets a week for each major muscle group. All of them just compound movements. He's doing amazing. He's turning 50 and he just pulled a 315 today for...this is a guy who never really lifted.

He does his first time ever, doing a deadlift four months ago. Seeing the same thing that you're talking about, all the high reps stuff. Like I said, when I was five, six, seven years ago, I found that taxing. I could only imagine what would it be like in a 50-year-old body.

Mark: There's a time to tax. That time is when you're in your middle, late, novice period, your intermediate period. See what you can do, push it. See what you can recover from, tax it, find your limit, train at your limit because when you're at that age, you can get away with it. That's how you become the big, giant, strong guy. Pushing it to that limit, finding where the limit is, extending the limit.

When you're 58, when you're my age, when you're 60, 65, you just have to be realistic about what you've got. What you got is a completely different hormonal milieu than you did when you were 22. When I was 22, I could jump off of buildings for plyometrics. All it would do is make you strong, but that's not now. Several things change as you get older. Obviously the hormone situation changes, your growth hormone which helps you heal up, connect your tissues and stuff.

Mike: Your testosterone level.

Mark: Testosterone, and it's not that the levels are down, but the receptors are not as effectively responding to the presence of testosterone as they were when you were young.

Mike: They could be down depending on...

[crosstalk]

Mark: ...your transcriptional AIRE accumulate. You don't build things as effectively, in terms of effects of training accumulated injuries. As a result of accumulated injuries, you're in a minor level of pain all the time. This is a stress. That minor level of pain all the time affects your ability to sleep effectively at night. You don't get to sleep like you used to.

If you medicate, the quality of sleep isn't as good. Nutritionally, you're not as good at absorbing nutrients, most especially protein as you get older. Therefore, you have to have a higher protein intake in terms of grams of proteins a day per pound of body weight. The protein has to be of a higher quality. You get away with Hoffman's High Protein Soy Flour when you were a kid.

As you get older, your protein has to be of a higher quality because you're not absorbing much of it as you were when you were younger. All of these things accumulate into the fact that you are not going to be as effective at recovering from training as you're older. The training variable that seems to be the one that is most hard to recover from with age is volume.

Mike: I've find that even with younger...I've emailed and worked with a lot of people. I find even a lot of these young guys that are natural and they're trying programs that are having them do, for instance, a medium volume, probably like 12 to 15 set heavy workout for upper body. Then 12 to 15 set heavy for lower, doing that and alternating in the same week with something about the same, with a bit of a higher rep range, 8 to 10 rep range in their upper and lower.

They're trying to run a program like that, massive weekly volume. I've yet to come across a single natural weightlifter that's been able to do it for any longer than a few months, regardless of age. They also were in a caloric surplus. Forget about it if you're in a deficit. People I've talked to, they were just miserable.

They had to stop, even in a surplus. I remember running into one person that said they were able to do it for about three months in a surplus and progress.

Mark: I mean a big surplus.

Mike: Even at the end of that though, they didn't feel good and they just stopped, and they had to reduce weekly volume.

Mark: You cannot run a high volume program for more than six or eight weeks at a time, has been my experience. It doesn't matter what you're taking. It doesn't matter what you're on. It doesn't matter how much you're eating. It just beats the shit out of you.

At a certain point, the inflammation is going to accumulate faster than the gains are, and then you've got to quit. That's just the way shit is. I don't know anybody that's been able to sustain an extreme training regimen like that for...

[crosstalk]

Mike: I've come across guys that are on a lot of drugs that you run those kind of programs for longer periods of time, that's for sure, but, I don't know if...

Mark: They're wonderful for that. That's their primary function, is to deal with the effects of over-training. They help you recover. Once again, stress, recovery, adaptation is the cycle.

If stress is inadequate, you don't make progress. You don't adapt. If recovery is inadequate, you don't adapt. Both factors must be there. The older you get, the easier it is to provide the stress and the harder it is to provide the recovery. That's just biology.

Mike: Makes sense. Cool. For the listener, just as a simple takeaway here, is to understand that that's just how it is. In my experience, [inaudible 20:42], that you have to listen to your body, you have to see how your body responds, but you do have to know that your weekly volume...

How my program is laid out is, it's the same principles as yours, heavy compound lifting. The split is just a little bit different. You're doing upper-lower work, and you're doing a bit extra upper each week, because most guys, for instance, the number one complaint is not enough chest. Their chest is too small. Chest is a bitch. If you don't...

Mark: If aesthetics are your deal, you're going to have to bench twice a week. You have to bench twice a week.

Mike: Exactly. That's what I have. It's just working that weekly volume to make sure that you're not, and just for the listeners, how big, or lean, or strong is laid out, that weekly volume you should be fine with, but don't get over zealous.

I'll get people that will write me, "Hey. I'm doing two of these workouts a week. Do you think that's a good idea?" No. It's not a good idea to do 25 heavy sets, 80, 85 percent of all reps max per week, not a good idea.

Mark: It's hard to recover from that, unless you're taking a bunch of drugs.

Mike: Exactly.

Mark: If you're going to take a bunch of drugs, and everybody's going to respond a little bit differently to that, see what you can recover from. Just like, if you're not taking a bunch of drugs, there is a point in your training where you have to push the envelope to find out where the edges of it are.

That is something that pretty much everybody that's committed to their training does anyway, but just be aware of the reality of the fact that there is an edge to the envelope. If you mash on it too hard you're going to get hurt, and injuries set you back.

Mike: Injuries suck.

Mark: Injuries...

Mike: Our number one, avoid injuries.

Mark: Avoid injuries. Go right up to the point where you're going to make an injury, and then don't do it.

Mike: [laughs] Yeah. Practically speaking, that means you're going to go for that heavy pull. You're creeping up, and then you feel, your back starts rounding, you feel things are not where they need to be, put the weight down. Don't try to show off and do something stupid.

Mark: Absolutely. Getting injured is not how you get stronger. Not getting injured, but still pushing the envelope, is how you get stronger.

Mike: Yes. This is a good segue way into my next question here, which relates to heavy lifting. Because many people, guys, I've even had guys in their 30s worry about this, but maybe more so in their 40s and beyond, are scared of certain exercises, especially when we're talking about heavy weight, like bench press, deadlift, squat, the military press, the most important exercises, really.

Because they're afraid that if they try to push any sort of weight, even if they work up to it, they think they're going to get hurt. What's your take on this?

Mark: What are your alternatives to the major exercises?

Mike: Laying on machines and...

Mark: Which you can't train.

Mike: Yeah.

Mark: You can't train the non-major exercises. I think you and I talked about this in our original conversation. What's the difference between training and exercise? Training is a process by which you can effect change in the physical capacity of a system over time. It is the process that you design to produce changes in physical capacity over time.

[crosstalk]

Mike: Yeah, to progress or improve.

Mark: ...to improve strength. Now, how do you make long term progress on the leg extension machine?

Mike: You max out [inaudible 24:38] one day...

Mark: You don't.

Mike: ...and hurt your knees.

Mark: The fact is, you don't. How do you make long-term progress on the pec-deck? The answer is, you don't. You cannot make long-term progress. In other words, you cannot train isolated muscle groups, because they won't train. You can exercise them. You can work them real hard, but you can't train them.

You can make progress on the main movements that you and I both advocate, the deadlift, the squat, the press, the bench press. You can make progress on those movements for years, years, at a time. Therefore, those are the ones that the program must be based on.

If you want to use some of the machines for assistance exercises and all that, I don't do it anymore, and I don't even program it. I understand that a lot of people do it, and I understand that a lot of people like doing that. A lot of people have gotten some stuff out of it. I think they're probably, for the vast majority of people, a giant waste of time.

But let's assume that there is a reason to do squats and then some other legs, the stuff you're going to use for other legs is not going to be trainable in the absence of training the squat.

Mike: What about safety, though? That's the concern that I run into. They think that squatting is unsafe because the guy is 45 or something.

Mark: I don't know what you do about that. If the guy doesn't understand that squats are safe, then maybe his coach hadn't shown him that squats are safe.

Mike: What about...?

[crosstalk]

Mark: Squatting down and standing back up, inherently, is safe. They use the toilet, don't they? But the maintenance pattern itself, Mike, is perfectly safe. All we're doing is loading it.

Mike: That's where people have a misconception. They think that because their adding 200 pounds on their back, all of a sudden now their knees are going to blow out.

Mark: Right, which is hilarious because we don't, all of a sudden, add 200 pounds, do we?

Mike: Sure, you're working up to it. I'm not playing devil's advocate. I'm just saying, this is what...

Mark: I know.

[crosstalk]

Mark: My take on it would be that any trainee that doesn't understand that these movement patterns are perfectly safe has not been educated about it, and that's the coach's job.

The coach's job is to make them understand, make a new client understand, "No, I'm not going to hurt you. I do these movements myself. I do them with all my other clients. Nobody's hurt. There's nothing unsafe about it. Squats don't hurt your knees, because squats are a hips exercise. Squats don't hurt your back, because your back gets strong when you're squatting. That's why we squat."

"No, it's not an unsafe movement. If you do something wrong and your form is incorrect, then, yeah, you can get hurt, but my job as your coach is to keep that from happening."

Mike: That's the key there is that proper form.

Mark: Technique is the key to not getting hurt.

Mike: Yes. Even on the bench press.

Mark: A lot of people have squatted 800 without getting hurt. We're not going to take a personal training class... You get a guy up to, these guys that are paying you by the month to train them, hell, they're happy with 405, 505. You don't get hurt doing weights that are that light.

By the time you get to the point where the weight on the bar is more important than your ability to do the workout that day, you're a competitive lifter. When you put yourself in a competitive frame of mind, with any athletic endeavor, then winning becomes the primary concern and safety becomes secondary. That's what happens when you're a competitor.

If you're a competitive tennis player, the same thing is true. You're not concerned about getting hurt. You're concerned about winning. This is what it means to compete.

When we train people for fitness, we're not doing it in a competitive way. Our emphasis, always, must be on technically correct execution of these movements. If the movement is technically correct, then the potential for injury is very, very, very, very, very low. It's not zero.

Mike: I talk about that in the book.

Mark: It's not ever zero, but it's very, very, very, very, very low.

Mike: Weightlifting is just not a, it's not a very dangerous activity when done correctly.

Mark: No, it's not a dangerous activity because the stress is distributed. In these major exercises we advocate, the stress is distributed over a whole bunch of different joints.

This is completely different than a leg extension, where all of the stress is just on the knee, and not just the knee, but the anterior knee. That is dangerous. Squatting is not. If a guy doesn't understand that, then he hadn't had it explained to him correctly by his coach. That's his coach's job.

Now, when the lifter, when the trainee, when your personal training client, decides he wants to be a lifter, he wants to be a competitive lifter, then things are different. From that point on, when he enters the meet, then the emphasis is now different, because he's decided that he wants to do a total, in front of the judges at the meet, and he either wants to beat his personal record that he set himself under similar conditions, or he wants to beat somebody else.

When you want to beat somebody, the emphasis is now not on safety. It's on winning. But, for clients, what we do for clients is we show them the correct way. We teach them why it's correct. We explain to them that which they need to know.

Mike: Teach patience, that it takes time to build strength.

Mark: You teach them about training. Training is a process. "Yeah, we're going to squat every day you train for a long time because that's what works. Now, if you're not up for the boredom, or if making progress bores you, then perhaps you're not cut out for this. Not everybody needs to be training. Some people need to do CrossFit."

Mike: Or just exercises, a new workout, or...

Mark: Just exercises, do something different every day.

Mike: Yeah, move your body.

Mark: Burn some calories. Wiggle around. Get hot, sweaty, and tired, whatever you want to do. But when you've graduated to the idea that a process must be invested in in order to achieve a goal, then you're training, and you, the coach, direct that activity. If you don't know how to do it, then you're not a coach. You're just a trainer.

Mike: Yeah, I totally agree. The last point on this safety, for instance, we talk about the squad, the bench press because the line out there is that the bench press is bad for your shoulders or the military pressing is bad for your shoulder.

Again, so that the listener understands, regardless of age is that it's not like bench press is only for 20-year-olds, and then you with proper form, all of a sudden you are 40 and you starting working out, that you can't bench press or you're going to blow your shoulder out. You know what I mean?

That's an area where people are concerned about, at least that I hear about, the shoulders in particular, and if you keep your form in and you don't flare your elbows out, you don't roll them, you don't do all the stupid things that people do and you use the weight that you can handle. Would you agree, Mark, that it's just like any other movements? It's a safe movement.

Mark: Yeah, the way we describe our bench press in basic barbell training is a safe way to bench press. I would add that if you are doing both the bench press as a lift and the press as a lift we recommend for our strength training emphasis people, not competitive power lifters obviously, we recommend that a one-to-one emphasis bench press to press be observed.

Under those circumstances no, you are going to have any trouble with your shoulders. People who have problems with their shoulders were competitive power lifters with an interior emphasis on the bench press...

[crosstalk]

Mike: Yeah, that makes sense.

Mark: We don't see shoulder problems with people that do one-to-one bench and press.

Mike: The pulling ploy helps too right, because so you don't get your posture all messed up and so your back muscles do what they are supposed to do and holding.

Mark: There's a reason we've carefully chosen the five basic exercises that we use, and there's a very good reason why we teach them precisely the way they're taught. Believe it or not, we thought about this really hard, and what we arrived at is a way for people who are interested in general strength and conditioning to perform these exercises at their optimal efficiency for long term progress and it works.

Mike: It's sustainable for your entire life.

Mark: Sustainable for decades, decades.

Mike: The great thing about it. Do you think that any sort of special measures should be taken to preserve joint health as you get older? Like maybe things that would reduce inflammation, you know fish oil, spirulina or glucosamines.

Mark: I think you probably should take some fish oil and glucosamine joint work for half of the people that take them. I've seen different numbers on that.

Mike: That's what the research shows that it's kind of...

Mark: I think some people are able to absorb that molecule and transport it, and other people are not. I don't know why, I don't know if it's digestive environment, transport environment, receptor site environment, I don't know. Everything I've seen showed that glucosamine worked for a percentage of the population and they don't work for me.

MSM, I don't know anyone that works for, but there may be someone that claims they get an effect out of that. There's all kind of these supplements that the vast majority of the supplements...

Mike: Are a waste of money.

Mark: ...are a waste of money. Best I can tell they are a waste of money. Everyone just needs to be taking some fish oil. Not a bunch, but a little bit of fish oil. Everybody probably should take anywhere from a half gram of vitamin C every day. I think occasionally a strong multiple vitamin is useful every three or four days. I think creatine is probably a good idea for most people

[crosstalk]

Mike: Probably the only crewman who...

Mark: [inaudible 36:19], our nutrition guys recently convince me that BCAA's are a real good idea after you train, but I don't, I think a lot of people spend unnecessary money on supplements. I think training and enough calories to recover, quality of sleep, all of these things are very, very anabolic.

Mike: Any other things for joint health like do you find, for instance, I when I'm squatting, not knee wraps but I like knee...

Mark: Sleeves.

Mike: ...knee sleeves.

Mark: That's what I was going to recommend. A lot of people, especially if they been training for a long time can benefit from either a knee sleeve or a light wrap that provides a little compression around the joint. I not talking about power lifting type five-liter knee wraps that acts like an exoskeleton but a little bit of compression.

Mike: It keeps the joint warm.

Mark: It keeps the joint warm it just holds the tendons in place, just makes it so you can squat without pain. If your knees are bothering you first step to do is a sleeve, if they continue to bother you the second step would be to put on a light wrap, this of course assumes correct technique.

This assumes correct technique because the number one cause of knee pain when you squat is front squatting your squats. The squat properly performed is at hips movements. It won't bother the knees at all. Now if you been squatting for years and your knees are chronically inflamed, then that happens with a lot of people. Then...

Mike: Or from a bunch of running. I've run into that.

Mark: Yeah. God almighty, running is much worst problem for knees than squatting. God almighty, yes. Lots of, but once you start getting tendonitis in the joint it's real difficult to control. It really, really is and you can take all of the anti-inflammatories you want, but once the changes have started to take place in the connective tissue and it's just real bad.

The thing to pay attention to is technique. Stay out of your knees when you squat put it on your hips where the stress belongs, put it on your back where the stress belongs, stay out of your knees and you want have any knee troubles.

Mike: I found some mobility and type work can help. I don't know if you found that but...

Mark: I haven't found that, no. But I know that it's very, very popular, and I know that people aren't going to pay any attention to me when I say that but I think stretching is highly overrated and a giant waste of time. In fact, I just had an article appear in our friend pjmedia.com about this, "The three best ways to waste time in the gym." Way number one is to do 30 minutes of stretching before you train.

Mike: I'm not a fan of stretching either. I'm more like I gotten help in my own. My VMO is very tight in my right leg and it would mess with my knee sometimes, but doing foam rolling it doesn't feel god but...

Mark: I don't know I got my problems with foam rolling. I can explain with foam rolling here in a second. The second way to waste a bunch of time in the gym is with excessive warm-up. If you do 20 minutes on the roller before you...

Mike: What's the point?

Mark: You're two minutes of warm-up and 18 minutes of training then what's the point? It's a conditioning and we come here to train we are not here to conditioning.

Mike: You're wasting energy.

Mark: You're wasting energy, and you're wasting time. The third way to waste time is to come in and do the same weight every time you come in. You're just not making progress when you do that.

I am a big believer in the effectiveness of action-release therapy. I have had it done myself I know too, too many people who have, in the hands of a competent therapist released, say an IT band and knee mechanics were immediately improved and pain went away. There are lots and lots of examples of this.

Shoulder flexibility is much, much more quickly and positively affected by an active-release type massage than it is for all the stretching in the world. People are much more effectively increasing their flexibility in shoulders with the hands of a good therapist.

Here's the problem with foam rolling as I see it. If you do not have an element of sheer force being applied to the tissues by the hands of a therapist then you are not going to break anything loose. In other words action-release therapy predicated on the idea of applying a sheer force with the hands, through the skin, into the connective tissue that actively stretches and break loose adhesions and that sort of things. Moves things in that relation to the underline tissues. You understand what I mean by that?

Mike: Sure.

Mark: I'm expressing myself clearly. Foam rolling is compressive only. It feels like the same thing, but it's not. It feels like the same type of pain. Yeah, there's the mashing component, but it completely eliminates the sheer component, and as a result it just mechanically does not do the same thing as an active-release treatment.

Mike: I found that. I actually see a massage therapist that she worked on Olympic rowers for many years then worked on cyclist so she understands the anatomy, understands also that it's not a feel good massage, but kind of just beats the shit out of me.

I definitely get more out of that than and I can do on myself, but I have noticed using a lacrosse ball certain muscles that I was able to apply enough force to with a form roller especially on my quads and stuff maybe because they were so tight that was just the way they was.

Mark: I could be. A lot of people report a lot of positive stuff with foam rolling, I just haven't found it to be...I found it to be a kind of trendy deal and my natural tendency is to not be trendy. It's just I don't see the reasoning there.

By the same token I got theracanes laying all over the place. I get little spasms in my back and direct compressive therapy on a muscle spasm does in fact break the thing up. When I think of foam rolling on the legs I tend to think of people trying to do an active-release type of therapy on themselves and the mechanics are completely different. But there are gray areas here. That's just my impression of foam rolling, is if you can't figure out a way to stretch the tissues in sheer.

Mike: I thought that even using a barbell in the gym on my quads even helped. Didn't feel good but I was able to put enough force on it where I could...

Mark: You might have been able a barbell to produce a little sheer. I don't know. I don't know, man. I don't know I have the tendency to...

Mike: Yeah, I'm with you. It is kind of a...

Mark: All of that stuff is just a trendy waste of time.

Mike: Yeah, I know. It's cool to bring in your bands in the gym and look like you're all professional.

Mark: Oh yeah. All these flossing rubber bands and all this other shit. That very, very fashionable tape that everyone smears all over themselves

Mike: The placebo tape.

Mark: The placebo tape, and that is really neat because you get to shave. It gives you a reason to need to shave. and that's very trendy as well. I, of course, don't shave. It would take too long.

Mike: I've never tried the placebo tape, never had a reason to.

Mark: Some things are distasteful. I don't play the lottery either. I'm just ideologically opposed to it.

[laughs]

Mike: You talked a little bit about this already, but what are some of the strategies that middle aged people can make sure that don't over train or get hurt? We talked about weekly volume or making sure the volume isn't too high, but have you come across any other tips like maybe some sort of periodization where they are going heavy, heavy every week necessarily or more frequent de-loading or something like that?

Mark: I think that people who have been training for a long time have got to use some variation in their loading cycles. That's just obvious. An advanced trainee, no matter how old or young he is, will not respond to linear loading [inaudible 45:58] . You can't go up five pounds every time beyond a certain point. At that point you have to start cycling your loading. That's just, duh. If you've got a 60-year-old novice, no.

Mike: Let's say a novice in his 40s.

Mark: A novice in his 40s, that's not called for. Do the novice loading till it doesn't work anymore. When it quits working, then we'll worry about getting complicated, but until complex is necessary simple is more logical. It's more efficient.

Mike: If someone is running into some issues then I guess those are two obvious things that they can do is there could be a more frequent de-load. I don't seen reason why that would hurt. What are your thoughts on that?

Mark: I don't see any reason for anyone to de-load unless there is a reason to de-load.

Mike: I find probably after 8 to 10 weeks...I also do some real heavy power lifting type. I work in some real heavy submittal and a little higher rep stuff. But I've found in my body in working with a lot of people...you worked with a lot more people at this.

That's an interesting point, because I find that a lot more people, somewhere around the 8 to 10 week mark, if they're every week hitting those heavy compound lifts, a lot of people start to feel, maybe not so much in the novice but more in the intermediate, after they had some experience under their belt.

They start getting the overreaching, the over training type of feelings, like kind of fatigued in the gym. Everything feels heavy, sleep gets a little bit messed up, and then a week de-load, come back fresh, ready to go.

Mark: The first indications I have of that with people that I'm involved with training, The first thing we examine before we talk about alternate training is, are you sleeping enough? Are you eating enough calories? Usually they are not doing enough of either one. Usually they are under eating either proteins being undersupplied, they're trying to operate at a lower deficit. These the first things that you do. Rule that out. Rule that out.

Mike: Sometimes that's necessary.

Mark: Here's another thing the most common novice mistake is not resting long enough between sets. Because if you are only resting two minutes between your work sets of squats. Guess what? You're not going to make all of the reps of your last set. The first thing you have to do is rule out the most common novice mistakes -- under sleeping, under eating, and under resting between sets.

Once those things have been accounted for and we are still having problems and it may be necessary to do a reset. But the far more common are the three moments agreed just novice mistakes. Once that's all been sorted out yeah, it may be necessary to reset, do a de-load or move on to more complicated programming, like intermediate program, or a four day weeks split or something like that.

But until that's absolutely necessary and that involves the correct analysis of what's taking place every day in the gym, then don't monkey around with programming that we know works for a very long period of time under optimal circumstances. You have to make sure that your circumstances are optimal. If it turns out that its necessary to change things up then change them up sure.

Mike: Sometimes, for instance, in a calorie deficit, if they are starting out at a high body fat percentage that what they need to do then they just got to be aware that that's going to affect their ability to recover. They're not going to be able to go as long before they have to dial it back to give their system a rest.

Mark: I'm a big fan of eating more.

Mike: We talked about that.

Mark: I'm a big fan of eating more. I think that your training builds muscle mass. Fat can be dealt with later.

Mike: Sure at that point though, no matter how fit you are, it's going to be different. as a deficit it's not the same.

[crosstalk]

Mark: If you are in a calorie deficit for whatever reason, the first thing you have to dial back, once again is volume. That's the first thing that must go. It's like artificial age.

[crosstalk]

Mike: Yeah, that's a good way of putting it. What are your thoughts on upper ceilings of weight? We kind of talked about this a little in the last one, but how it relates to age. Are there any age, and I think I know your answer on this, but I've been asked, so I'm going to ask you.

Are there certain numbers where you would say well, a guy in his 40s or 50s whatever, here's something to shoot for, but if you start going beyond these numbers and you're pulling, you're squatting, you're pressing. It might not be a good idea. It might increase the chances of injury.

Mark: No, there's not any way to give specific quantitative numbers for that. It's so thoroughly, varies on the individual. Some people are freaks. Stan Efferding, he's a freak. Guy's amazing. A physical specimen. The older guy, big, strong, even he watches his volume. Every once in a while some untrained 50-year-old guy walks in the gym, becomes a freak. He just got that type of physical potential. He's got the genetics.

He's got the ability to display those genetics effectively because of his ability to manage his lifestyle and his training, and he turns into a freak. Most commonly, if you've waited pass the age of 30 to start your training you're not going to be anywhere close to the potential that you would have shown had you started when you were 19.

I guess this is obvious to me to the point where I don't even know why we have to talk about it, but it's a popular topic. How strong can I get? I don't know. Let's see. How much time and resources and attention are you willing to devote to it?

Mike: What are your genetics?

Mark: What are your genetics? I don't know.

Mike: I see some of these guys in the gym, I've seen this, where skinny little guys, I've seen it a couple times. It was actually just confusing. Where this skinny dude, was bench pressing 315 four reps like it was nothing and he probably weighed 160 pounds. I was just like, what am I even witnessing? How is that even like...? [laughs]

Mark: Anytime you start to wonder about the amazing nature of human potential and the, "You can't tell by looking phenomenon." Just remember Mike McDonald, from back in the late '70s. Mike McDonald benched 600 at 198.

Mike: That's insane.

Mark: With a 15 inch arm.

[crosstalk]

Mark: You can't tell by looking. I've had my ass completely handed to me on several occasions by guys that didn't look like they could do it. You can't tell by looking. I don't know how strong you can get. Let's find out.

Mike: That's the point. It's that even...

Mark: That's all there's to it, find out.

Mike: At that age, you don't have to worry so much, right?

Mark: How do you make it possible to get as close as you can to your physical potential? You completely rearrange your life to facilitate adaptation. To the extent you're able to do that, you will express the greatest percentage of your genotypic potential. But there are so many other variables, we don't call it genetic potential anymore, because that's just one aspect of the ability to express that. It's far more than genetic potential.

There's so many other factors at play, we just call it physical potential. Really, what would constitute the perfect example of the ability to express an individual's genetic potential, physical potential? You would have to get him when he was nine. You would have to teach him the things you needed him to know. You would have to carefully watch what he was doing.

By the time he gets into about 10 or stage four, when he's 13 or 14, then you start loading it. You take the advantage of the fact that every month, his testosterone levels are a little bit higher level than they were, the previous month. His loading goes up. You offer him absolute perfect nutrition, absolute perfect rest environment, no other physical distractions, other than the thing that you're trying to train him to do.

Under those circumstances, you would probably approach a high percentage of his genetic "potential," because you've managed all of the environmental effects that govern the phenotypic expression of the genotype. Take a guy that's 50. Think about that. Compare the two circumstances and you'll see the problem.

Mike: The takeaway on that, though, for the guy that's 50 is, don't despair. You can still...

Mark: Don't despair.

Mike: ...still push yourself, you can...

Mark: The takeaway is, what are you going to do, nothing? [laughs]

Mike: And that you can train hard, and as long as you're smart and you keep your form and you don't do anything stupid, you don't have to limit...Some guys think that even if they're building up strength, they shouldn't, "My so-and-so, my doctor told me that I shouldn't ever bench press more than 185 pounds or I'm going to hurt my shoulder."

Mark: A rather arbitrary distinction.

Mike: Exactly. No, that's not true. Build up the strength.

Mark: That's absolute stupidity. That's absolutely silly. I've been doing this for 37 years, and I can't tell you how much you can safely bench. Your doctor, who doesn't know anything about either you or the bench press, decided on 185? What the hell? You know? I don't know. It's strange.

Mike: Exactly, it is strange. I just wanted listeners to know that the point is, the training experience isn't so much different, but the weight that you're going to eventually push, pull, and press is not going to be in squat.

It's not the same if you're starting later than when you're starting younger, but you can still go in the gym and put in work. You don't have to be afraid that, "Oh, I'd better not squat more than this number because I'm going to hurt myself." You know what I mean?

Mark: Mm-hmm.

Mike: OK, awesome. Those were the main points that I wanted to cover. Is there anything else you think the listeners should know about what we've talked about?

Mark: I think the thing to remember about the general topic of older people training is that A, you have to train. Your option is not training and then there you are. You...

[crosstalk]

Mark: You don't get anything accomplished. B, if you're hurt when you're training and you're old, you're getting hurt anyway. What would you rather do? Hurt and be strong or hurt and be weak? Pain is just part of getting old, it's just grow up, that's all there is to it.

C, the variable you have to manage and you have to take the most trouble with is volume. Don't try and do too much. Don't for a minute think that your 20 again, you're not. One of the biggest problems we see with older guys that were former athletes that start back training is, is that the last experience they had with training was training in an 18-year-old body.

You can't do that anymore. You have to listen to your coach. Your coach knows more about this than you do. He's had more recent experience training people in your demographic. Since you're older and you can afford it, point four, get a coach. Ask somebody that knows more about this than you do to help you with it. It will pay enormous dividends.

It may seem expensive at first, but it's not as expensive as surgery. Find a competent coach. Starting Strength coaches can be found at startingstrength.org. We are a growing network of competent coaches. I assure you that anyone holding the certification of Starting Strength coach is competent to help you.

Mike: Yeah, and that's also then kind of segue, that's where people can find you and find your work and of course...

Mark: Find me at startingstrength.com, find a coach at startingstrength.org. Starting Strength Coaches Association website is startingstrength.org.

Mike: Great, and then of course people are going to know I recommend Starting Strength among some of your other works as well. The book, Starting Strength, of course you can just buy wherever you buy books...

Mark: Amazon or on startingstrength.com

Mike: Thanks so much for taking the time Mark, I'm really glad...

Mark: Sure, Mike. Anytime.

Mike: Glad we were able to do this, and I look forward to the next one.

Mark: OK. Talk to you soon.

Mike: Cool.