

Physical Activity and Older Adults

Applications from the [GSA KAER Toolkit on the Management of Obesity in Older Adults](#)

Momentum Discussions Podcast from the Gerontological Society of America

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Announcer:

The Gerontological Society of America, meaningful lives as we age.

Jen Pettis:

Welcome to this GSA Momentum Discussions podcast addressing physical activity for older adults. Momentum Discussions highlight topics experiencing great momentum in the field of gerontology. We are grateful to Novo Nordisk for their support of the GSA KAER Toolkit for the Management of Obesity in Older Adults and today's podcast. My name is Jen Pettis and I'm the Director of Strategic Alliances at the Gerontological Society of America. I am delighted to serve as the host for today's Momentum Discussion.

Jen Pettis:

Joining me for this podcast is Eric Levitan, Founder and CEO of [Vivo](#), a fitness program for older adults that is built on science, taught by expert trainers, and enjoyed in a live online, interactive, and fun group setting. I am also joined by our member and friend, Dr. Kathryn (Katie) Porter Starr, a registered dietician and an associate professor at Duke University School of Medicine and research health scientist at the Durham VA Medical Center. Katie also serves as a scientific advisor to the Vivo team.

Katie and Eric, thank you for taking time out of your busy schedules to discuss this important topic.

Dr. Kathryn Starr:

Thank you, Jen, for having us and to GSA for allowing us to be here and talk about our passions, which are helping older adults live their best life.

Jen Pettis:

Katie, to get us started, can you share a bit about why it is important that older adults engage in regular physical activity?

Dr. Kathryn Starr:

There are several reasons why physical activity is important for everybody, regardless of age, but specifically for older adults. I want to take a step back and first state that one of the reasons that physical activity is important is because as we get older, we have an increased risk of developing chronic health conditions such that 80% of adults 65 and older have one or more chronic health conditions. When we think about how we can prevent chronic health conditions, physical activity is the number one way we can do that. Participating in both aerobic and strength training exercises can help reduce your risk of developing chronic health conditions, including obesity, type 2 diabetes, heart disease, and cancer. Additionally, physical activity can help reduce your risk of developing dementia and Alzheimer's disease. Evidence shows that that reduction of risk can be up to 45%.

As we think about aging and how we want to live our best lives, physical activity is one of those tools in our tool belt that we can do to help improve our lives and help reduce the risk of our developing diseases. Furthermore, I want to state that it is not just the reduction in risk. If we have a chronic health condition, physical activity can also help reduce the progression of that chronic health condition. We know that it slows down the progression of chronic health conditions and can help improve our overall health. It is not that if you have a health condition, oh well, physical activity is not going to help. That is not the case at all. I also want to mention the fact that when we think about aging, one of the common things that comes up is that we want to maintain our independence.

Physical activity is extremely important for us to be able to maintain our independence as we get older, particularly when we think about strength training. Strength training does help reduce the risk of developing sarcopenia. Sarcopenia is the age-related loss of muscle strength, muscle function, and muscle mass. When we think about physical activity it's important for us to think about it from the perspective of not only does it help us improve our overall health and quality of life, but it's going to help us maintain that independence as we get older.

Jen Pettis:

Eric, Katie told us why it is important that older adults exercise. What are the recommended weekly physical activity guidelines that the older adult should participate in?

Eric Levitan:

The CDC has done a wonderful job articulating what those guidelines are. For adults 65 and older, it's recommended to do at least 150 minutes per week of moderate intensity activity such as walking, gardening, hiking, or something that might increase the heart rate to a moderate level. The alternative is 75 minutes a week of vigorous intensity such as jogging, running, swimming, et cetera. It's not just about cardiovascular and aerobic conditioning, it's also about strength training. Katie mentioned the importance of this. The CDC also recommends at least two days a week of activities that strengthen muscles. In addition to that, focusing on activities that improve balance, such as standing on one foot or walking with one foot in front of the other and practicing those sorts of activities.

Jen Pettis:

Katie, with the activity recommendations that Eric just mentioned, what stands in the way of older adults being able to routinely meet those guidelines?

Dr. Kathryn Starr:

Interestingly, we know how good physical activity is for us. Unfortunately, most older adults are not meeting those recommendations that Eric just mentioned. There are several reasons why. There has been research into the barriers in meeting these physical activity guidelines, which include the categories of personal, environmental, and organizational factors. When we think about personal factors, the number one reason that many people mention that they just do not want to participate is because of pain. People can have joint pain, knee pain, or injuries. As we get older, we know that we see an increased risk in arthritis and joint and musculoskeletal pain. What is interesting to know is that doing physical activity has been shown to reduce pain.

It is important for us to be able to educate individuals who have pain that working with healthcare providers and physical therapists are beneficial ways that can reduce that. A couple of other reasons from a personal standpoint is a risk of injury. Obviously, if we're not educated on how exactly to do an exercise properly or we've injured one of our muscles in the past, there is that fear of injuring that again, or the fear of falling. From an environmental factor, a reason for not getting physical activity is our social determinants of health, such as feeling unsafe in their neighborhood. There's no walkability, uneven sidewalks, a lot of hills or stairs, or poor weather. For individuals who do experience heavy snow or ice, we know that there is a reduction in physical activity during those months because of that risk or fear of falling.

Thinking about those physical environments and then not having access to gyms is a barrier to physical activity. I want to hit on the organizational factors because I think these are important as we think about individuals who look like us when we are exercising. We want to exercise with people who are our similar age. Many times, when you go into a gym, we're not typically seeing individuals who are 65 and older. We're seeing a bunch of 20-year-olds usually in those settings. From a structural organizational factor, there are not many resources available specifically for necessarily for older adults. While there are some resources, educating individuals about what and where those are is important because these are the barriers that we encounter. From the personal, environmental, and organizational factors, how do we start tearing down those barriers and finding some facilitators to help improve physical activity is extremely important as we're thinking about our older adult population?

Jen Pettis:

Katie, thinking about the barriers for older adults and then layer on the chronic disease of obesity. Are there additional barriers that older adults who live with obesity or overweight face when they are seeking to incorporate physical activity into their lives?

Dr. Kathryn Starr:

There is research looking at the barriers to starting an exercise program with having the chronic health condition of obesity. One of them is just shame. "I don't feel comfortable doing these exercises in front of other individuals." "I don't even know where to start so that I don't injure myself." We must start tearing down these barriers, which includes having a place that works for us. If we are dealing with obesity, our gyms are not always set up for individuals with obesity. That is a key barrier that we have where people think, "I'm walking into a place where I already don't feel comfortable and now, I'm going to have to exercise, and I'm just worried about what other people are thinking or perceiving of me." Having a safe place is something that we should consider when we're dealing with older adults with obesity.

Jen Pettis:

Next, I'd like to hear from both of you because I think you have unique perspectives from your day-to-day work. What are strategies to overcome those barriers? Eric, let's start with you.

Eric Levitan:

This is at the heart of why we created [Vivo](#), to remove some of those barriers. Katie has articulated very well that there's a multi-dimensional aspect that we are up against. We are thinking about those individually and starting to strip those down to figure out how we can present something that doesn't create that sense of fear, shame, or embarrassment. What guides an older adult who may not be comfortable or experienced with exercise? How do we do that? One of the things that we've tried to do with Vivo is keep this individualized, knowing that everyone has something different going on. It's not even necessarily from person to person, often it's from day to day. On Monday, we may wake up feeling fine, and then on Thursday, we wake up and our knee, shoulder, or neck hurts.

Giving someone the ability to communicate what's going on with them on that specific day, as well as offering a feedback mechanism which allows for accommodation creates a trusted relationship where an older adult will feel safe to engage in that activity. What we do at Vivo in particular is we provide this small group experience that allows for individualized attention for everybody. We can keep people safe; we can modify an exercise if they're experiencing pain or discomfort that day. We can make sure that they are doing it in the correct form. We can look at their space and make sure that we're calling out things that may be providing hazards for them and providing this individualized mechanism. We can meet people where they are not just in terms of metaphorically, but physically.

We all create these excuses that prevent us from doing things that we know we should do. An example of excuses used are, "I don't have time, I don't want to deal with traffic, I don't want to deal with the weather, I don't want to deal with transportation." Joining an online program that is live and interactive is not a video that you can push off until later. It's an appointment in your calendar. It creates that motivation and removes some of those excuses of why people don't do this. We lean into this concept of individualization, meeting people where they are. The last component is providing a social network that creates some sense of accountability and community that drives behavioral change. That's the other aspect of what we lean into from a Vivo perspective.

Eric Levitan:

These live and interactive small groups are great for individualized attention, but they're also conducive for creating a social experience in a group of 50, 60, 70 people. It's hard to create that social environment. There are just too many people. In a one-on-one environment or if you're watching a video by yourself, there isn't a lot of social engagement or any. In a small group of eight people or less, it's quite simple. We're very intentional about doing these in Vivo classes where we'll prompt questions. We'll ask people questions while they're exercising, which stimulates conversation. It's also good for brain health. This is a wonderful mechanism to create a sense of community in this class, which a small group affords you.

Jen Pettis:

Eric, I want to ask you for a follow-up. Vivo does assessments to show progress. I would think that if the older adult sees that they are making progress, that's certainly a motivator for sticking to it as well.

Eric Levitan:

That's a wonderful question because there's two levels of motivation that we think about when we're talking about creating engagement with any member, but specifically an older adult. The first is creating an environment where it's trusted, safe, and where you're getting individualized attention, which helps open the door for trying a program like Vivo. As we think about how you get someone to keep coming back to make this behavioral change, we certainly consider community and accountability as one of those mechanisms. But the other is showing progress. It's a wonderful motivator to not only be doing an activity that you are enjoying, but you feel better afterwards, which fortunately exercise has that benefit. But when you get to see data and see that I started here and now I'm here, it's this wonderful motivator that keeps you coming back and seeing that not only do I feel better, but I can also see on paper that I'm doing better.

We see this consistently where we do baseline assessments. We establish a bar from a strength, endurance, and balance perspective and then we reassess every two to three months and we produce reports. It's not rocket science, Jen. It's amazing to see literally 100% of everyone we've ever baseline assessed and reassessed two to three months later has gotten stronger. A hundred percent. It is just the way the human body works. If we get people to consistently engage in a program to a level of challenge, like Vivo, we will see improvements and getting those improvements to your point is a wonderful motivator. To continue to have you wanting to come back and it becomes this self-reinforcing mechanism.

Jen Pettis:

Katie, with your perspective as a clinician at the VA, what are some insights from you with some strategies?

Dr. Kathryn Starr:

From a clinician standpoint one of the key things that I have found to be successful is trying to meet the individual where they are. Oftentimes we hear recommendations to exercise and change your diet. While we can do both of those things, without guidance and clear instructions or resources, that sits on deaf ears because it's difficult to know where to start.

Dr. Kathryn Starr:

As a clinician, one of the things I like to do is first identify what is my patient's goal. What is it that they're wanting? Where are they in this process? Are they ready to make some changes? What is it that they're wanting, and how can I tie that goal together with diet and exercise? Are there ways that we can even just start planting some seeds here or start talking and having a conversation? Not everybody's ready to make these changes. We must continuously have these conversations as clinicians to help build trust, structure, movement, and behavior change. The other important takeaway that I learned over the years that has helped me understand that we must make sure it's very clear to our patients that they don't necessarily have to begin their journey with hitting those 150 minutes of moderate physical activity or 75 minutes of vigorous activity or two days a week of strength training.

Sometimes patients think that they should go from zero to a hundred and that is a great way for failure to happen. Research shows that small steps do show progress. As Eric said, showing progress and seeing progress builds more progress. There are ways in which we can do that so that people aren't going from not exercising at all to trying to do 150 minutes of moderate physical activity and then they are in pain, they hurt, and it makes them not want to do it anymore. I think it's meeting patients where they are, understanding where they are and what they're willing to do. We need to start by building a framework of how we take baby steps to see progress so that we can maintain success and positive behavioral change. Those are the two things that I've learned as a practicing clinician working with our older adults.

Jen Pettis:

Eric, when you talked about the recommended weekly physical activity, you talked about the aerobic activity, but also talked about strengthening muscles and improving balance. Why are these things important for older adults?

Eric Levitan:

As Katie alluded to earlier and talking about why exercise was important, we are all losing muscle mass as we age. This is a natural part of the aging process and unfortunately it serves as that gatekeeper for much of what determines our quality of life as we're older. It turns out there's this amazing principle that we've known about for a very long time where you can challenge your muscles on a regular basis and develop strength and develop function. We try to encourage people to create an awareness that this is possible. It's not too late. A lot of older adults and especially older adults with chronic conditions that they're managing have this sense that it's too late. Exercise is something for people in their 20s, 30s, 40s, 50s and 60s; it's not for me. That could not be further from the truth. It is truly never too late. There were some landmark studies in the 1980s where they took individuals in their 90s who lived in nursing homes who had never exercised and saw incredible outcomes of individuals who engaged in strength training three times a week. It's important to communicate with people that it's not too late for them to start.

Focusing on this process of challenging your muscles on a regular basis begins to have this dramatic effect on our health, wellness, and independence. It turns out that building our strength is good for balance, it helps promote sleep, it lowers blood pressure and lowers cholesterol, and improves mood and helps with anxiety and depression. It's got all these amazing very tangible health benefits that we don't talk enough about.

Eric Levitan:

We've got all these technological advances, and we focus on number of steps and the Apple watches and Fitbits of the world that have taken over and got us focused on the importance of walking, which is one of the most important things that we can do as much as humanly possible. But in some ways, it's gotten us laser focused on the number of steps which has caused us to stop paying attention to these other things. Building strength is equally as important because it does provide all these ancillary benefits beyond just being able to do activities of daily living. Think about standing up from a chair. That is something that we do 100 times a day, if not more. When we lose our ability to stand up from a chair, we lose our independence. Standing up from a chair is a strength activity where you're using your core, lower body strength, and balance to rise up from that chair. It's important to focus on these activities of daily living that help maintain our quality of life and our independence. That is the benefit of strength training.

Jen Pettis:

Katie, one of the things that we have talked a bit about is the likelihood that an older adult may have one or more chronic health conditions. They may live with a disability that limits them from engaging in some of the types of exercises we have discussed. How can they safely engage in activity? What are their options there?

Dr. Kathryn Starr:

The first step is making sure that they have clearance from their PCP. With any health condition, we do want to make sure that we are talking to our healthcare providers and keeping them abreast of what we're doing. Then I will also say that collaborating with a physical therapist and occupational therapist if we are in pain or have been recently injured is going to be key.

Across the board, making sure that we are working with providers that specialize in musculoskeletal conditions is going to be key, especially if you have a recent injury or an impairment that is causing pain or we're seeing it flare up again. For individuals who have a potentially have a disability or have been living with a chronic health condition, one of the important things that we need to make sure we understand is that exercise cannot be a cookie cutter program. We are all different. We all have different movement patterns and potentially have health conditions or an injury that we have had for a prolonged period.

Making sure that when we start an exercise program that the exercise program is individualized is going to be key, and that there are modifications that can be made so that we don't re-injure ourselves. That is extremely important, especially as we think about our older adults. If something is causing pain, they need to be able to feel comfortable enough to say that is causing pain. Do we have another movement pattern that I can use that can help reduce that? Or is there something else where I can work that same muscle group without doing this movement? Having access to the expertise or an exercise program that has that expertise will guide them to make modifications to prevent a re-injury.

It's very important for older adults because we are going to be at more risk for injuring ourselves again, if we are just trying to do a cookie cutter program that doesn't have modifications or doesn't have different levels of intensity to meet us where we are and with what we need. We do have to challenge the muscles for us to break down the muscle, rebuild the muscle so it becomes stronger. But we need to be able to do that in a safe setting that fits and meets me where I am. That individualization is going to be the key.

Jen Pettis:

You mentioned those modifications and, Eric, I want to talk with you about the modifications because I would love for you to give an example for our listeners about what does that look like? If I start with a traditional squat or a traditional jumping jack, how do I modify that to make it suitable for people with different abilities?

Eric Levitan:

I love talking about this because this gets to the heart of what I think many older adults are afraid of, which is that “I can't do that.” My favorite thing to do in a presentation in a room full of people, especially with older adults, is say, “raise your hand if you can do a pushup.” You'll often see a smattering of hands, but not very many. The answer is everyone in this room can do a pushup, just not the version of a pushup that you're imagining in your mind. When we all envision a pushup, we think of the traditional method on the ground, on your hands and toes, lowering your chest to the floor and pushing, extending away. That is one form of a pushup, but that can be modified depending on your level of mobility and level of function, strength, and fitness.

That's the traditional way we think about it. However, some people don't have the upper body strength to do that. You can modify a pushup by instead of being on your toes, you can be on your knees. That is a slightly less rigorous way of doing pushups. Then there are some people that can't even get to the floor or don't feel comfortable getting to the floor. You can also do a pushup by leaning against a countertop and extending your arms away from the countertop so that your body's at an angle and some people may not feel comfortable with that, but you can also stand against a wall, and you can walk your feet back a step, two steps, three steps. The further your feet are pushed back from the wall, the more challenges you create. Then you can do a pushup standing next to a wall, which nearly everybody can do. It's a very safe, comfortable experience that we want to help the older adults that we work with find of all those different variations of a pushup, what's comfortable for you, where do you feel safest and start to challenge them to progress through this variation. Starting with a pushup standing next to a wall, slowly walking your feet back a little bit further as you get more comfortable transitioning to pushups from the top of a counter or the back of a chair and working down so that we get an increasingly challenging variation. But hopefully that is a good example of how you can take an existing exercise like a pushup and create variations to match the functional ability of any one person.

Jen Pettis:

Who might be able to help an older adult make those modifications?

Eric Levitan:

There are several types of roles that one can think of. Certainly, physical therapists are wonderful at doing this and, and, as Katie mentioned, dealing with an acute injury or coming from surgery, physical therapy (PT) is always a recommended first step as well as going through some rehabilitative process that can collaborate with an individual for where they are. But once you have completed PT the next steps are often ambiguous, and people are not sure what to do next. The things to look for are certified personal trainers specifically who understand corrective exercise and understand working with older adults and the nuances that come with aging. That is very much a part of what we do in Vivo. As an example, we look for those individuals who have that experience and that expertise to be able to know how to modify. Then obviously we train them on our program. What we've built out is this modification protocol for every single exercise that we do. Certified personal trainers and individuals who have that experience with corrective exercise and older adults are where I would go beyond PT.

Jen Pettis:

We're just about to wrap up, but I want to reflect on just a couple of things that I heard. One was, I heard loud and clear meeting folks where they are, and it's never too late to get started with exercise. I also love that message of, it's not all about counting the steps we need, but strength training and balance training and why those things are important for all of us as we age. Before we wrap up, I'd love to give you guys each one last word. A quick thought on one thing you want to leave listeners with. Katie, why don't you start?

Dr. Kathryn Starr:

The last words that I would like to leave everyone with is making sure that we just get started and find a program that meets you where you are and is individualized for your needs. As a clinician, the key point that I would like to leave is, as we are collaborating with patients, particularly our patients with obesity, is making sure that we are listening to their needs, we are listening to their goals, and that we are providing them with resources to help them meet those goals. Even if it is just starting the conversation, having the conversation, helping our clients understand that they are being heard and that exercise and diet are important and that here are some guiding resources that we can give them so that they can start that process and that we can be with them on that journey.

Jen Pettis:

Eric, the last word from you.

Eric Levitan:

I'll piggyback off what Katie just said. There's a quote I heard once that said, "don't think about it as one day." Think about it as day one. I think that's been a helpful mantra that I've tried to repeat to others. We tell ourselves one day, we all know exercise is good for us. Everyone who is listening to this podcast now knows this, but we often we say one day I'm going to do this and maybe we will wait for the new year on January 1st, and we come up with reasons to create those incentives. But it's thinking about making today, day one. Stop your mind frame of one day I'm going to do this and start by making it day one. As Katie mentioned, you don't have to go from zero to one hundred immediately, start doing things that help you move down that path and take it a step at a time.

We know that exercise is a potent drug for health and wellness. There is not another intervention on earth that does nearly as much to prolong our lifespan and preserve our cognitive and physical function. People aren't doing this enough and thinking about how you can incorporate this into your life becomes a critical thing as we get older, and it gets more important. Looking for opportunities to help you make it day one, looking for programs that are out there, whether it's Silver Sneakers that you may have access to through your Medicare Advantage program or a local YMCA or another boutique fitness company or a program like Vivo that is specialized in helping older adults to reach their goals and maintain that health and independence. "Don't make it one day, make it day one."

Jen Pettis:

Thank you both for taking time out of your schedules. I know you're busy. Katie, as always, we thank you for your ongoing contribution and leadership in GSA obesity work. We're grateful for both of your contributions.

Eric Levitan:

I appreciate it.

Jen Pettis:

Thank you to everyone who listened to our podcast. We hope you found it informative and enjoyable.
Thank you both, Katie and Eric.

Announcer:

The Gerontological Society of America was founded in 1945 to cultivate excellence in interdisciplinary aging research and education to advance innovations in practice and policy. For more information about GSA, visit geron.org.