

Physical Activity Recommendations

Hey, everybody. In this presentation, we're going to discuss recommendations for physical activity.

The SWAP method has been inspired by the Enduring Mover Framework created by Dan Pardi, and it stands for "stand, walk, and push." We'll discuss each of these three movement patterns on the next few slides.

Standing engages postural muscles that increase LPL, or lipoprotein lipase activity, and this increases energy expenditure by 2.5-fold when compared to sitting. Employees who stand while they work burn up to 75 percent more calories per day than those who sit all day. Simply standing and engaging in light activity throughout the day burns as many calories as three intense Spinning classes per week, and this is more effective than intense exercise at undoing the harm from excessive sitting. Frequent breaks from sitting lead to lower waist circumference, lower BMI, lower triglycerides, and more stable blood sugar.

You can reduce sitting time by using a standing desk at work, taking standing breaks for at least two minutes every 30 to 45 minutes, brief walking or light movement every hour, and standing up at long meetings.

Stand for about
half the day

Take a standing
break every
30-45 minutes

The goal would be to stand for about half of the day and/or take a standing break every 30 to 45 minutes.

For walking, light movement throughout the day has been shown to be more effective for promoting good health than only doing high-intensity exercise and sitting. The typical goal would be to aim for 10,000 steps or five miles of movement per day, and wearing a step tracker allows you to know what your current movement level is and how to increase it.

Tips for increasing your step count include taking walking meetings at work; using the stairs whenever possible; walking or riding a bike to work; doing your own chores such as gardening,

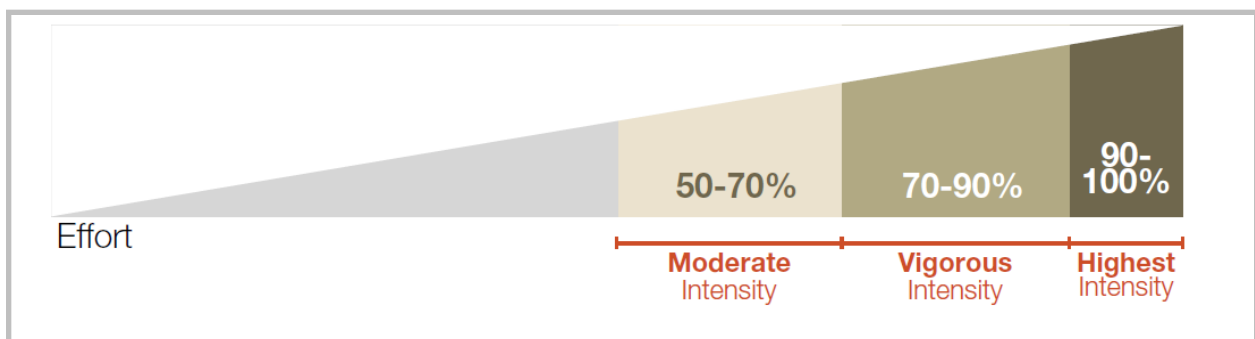
cleaning, laundry, etc.; getting a dog, which will encourage more walks and physical activity; choosing hobbies that require physical activity; and working at a treadmill desk.

Aim for **10,000 steps** per day

Incorporate **light movement** throughout your daily routine

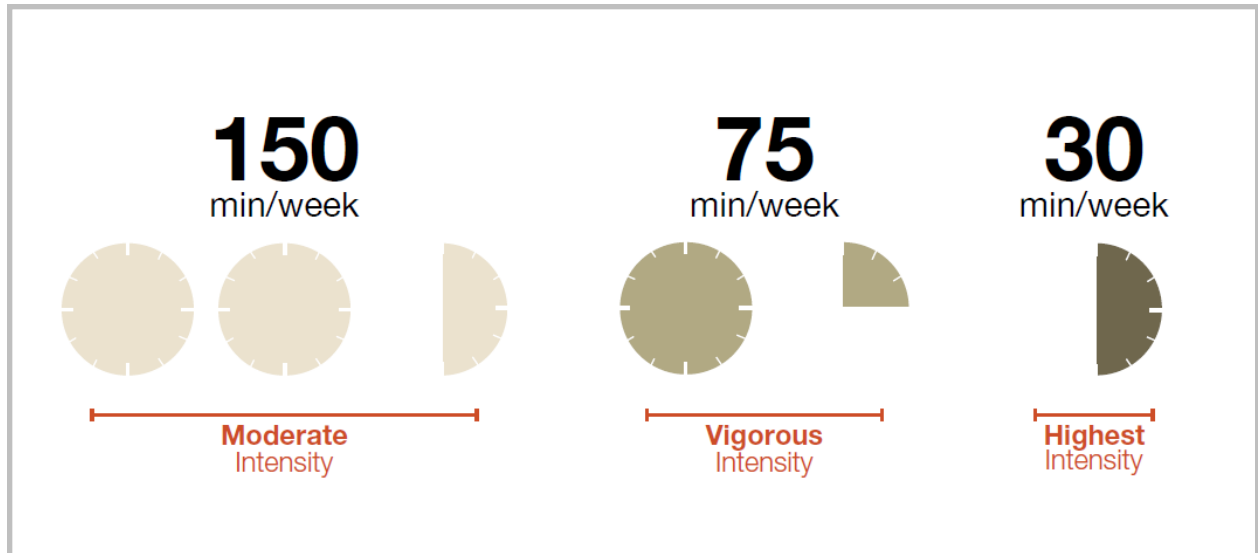
The goal would be to aim for 10,000 steps a day. Of course, if you're starting from a completely sedentary place, a lower goal would be more appropriate, maybe 5,000 steps a day to begin with and building up slowly from there. You can also incorporate light movement throughout your daily routine, so during your breaks, you could potentially do some push-ups, body weight type of exercises, or run in place very gently. You can just start to begin to incorporate more physical activity, nonexercise physical activity, throughout the day.

Finally, push stands for more intense physical activity that we typically refer to when we use the word *exercise*. This would be anywhere from one to two times a week to four times a week or more. It includes high-intensity strength training and/or interval training. This has been shown to improve resting metabolic rate, improve blood sugar regulation, and reduce body weight and body fat percentage. Incorporating bouts of moderate-to-vigorous-intensity movement throughout the day can also improve cognitive function and energy and reduce muscle and joint pain.



There is a specific definition of intensity that I'm using here, and it's based on perceived effort rather than an objective marker, so moderate intensity would be 50 to 70 percent of maximum effort. Vigorous intensity would be 70 to 90 percent of maximum effort, and highest intensity would be 90 to 100 percent of the maximum effort. The reason I like characterizing it this way is

that maximum effort will depend on the individual and his particular fitness level. For someone who is sedentary, 50 to 70 percent of his maximum effort is going to look really different from someone who is very fit and has been exercising regularly.



These are Dan Pardi's Enduring Mover guidelines for moderate-to-vigorous-intensity exercise. They would include 150 minutes of moderate-intensity exercise per week, 75 minutes of vigorous-intensity exercise per week, 30 minutes of the highest-intensity exercise per week, or some combination of the above.

Keep in mind that our ancestors didn't overdo it. They instinctively conserved energy as much as possible, and they followed a strenuous workout day with lower-intensity fitness activities the next day in order to improve fitness and lower their risk of injury.



Here is a summary of the basic movement recommendations. Encourage your clients or patients to stand for half of their day. You want them to take a standing break every 30 to 45 minutes or even

a short walking break. Aim for 10,000 steps a day, or perhaps a lower number if they are just starting out. Integrate as much light activity into their day as possible, so whether that's chores such as gardening, bicycling or walking to their workplace, taking the stairs, or walking the dog, integrating as much of that as possible throughout each day. Aim for moderate- to high-intensity activity throughout the week, so that would be 150 minutes of moderate intensity, 75 minutes of vigorous activity, 30 sets of the highest-intensity activity, or some combination of the above.

The following apps, tools, and resources can help your patients and clients set up the SWAP method in their daily lives. The first is 14Four. This is my program that provides a basic two-week physical activity plan for beginners looking to incorporate the SWAP method into their lives. It also includes guidance on diet, sleep, and stress management. It's a great starting place, especially for those who are not currently engaged in a lot of physical activity and don't have a lot of experience with working out and physical activity routines.

A Paleo Office

Standing Desks

Treadmill Desks
Trek Desk

Balance Disk
Fitter First

Yoga Ball
Natural Fitness Professional

Frequent Breaks Apps
Time out (Mac) or Workrave (Windows)

Here are some ideas for how to make your workplace a better environment in terms of physical activity, and, obviously, not all of this would be possible for every person. It depends on your work environment and your employer and what he will allow. Many employers are now allowing and even encouraging standing desks because of the studies that have shown that they can increase productivity and employee satisfaction. Some are even permitting treadmill desks, and certainly if you work at home, you can incorporate this. I have one myself, which I got when I was writing my book because I quickly realized that if I didn't do that I was going to be sitting or even standing a whole lot, which isn't ideal.

That's something I didn't mention on earlier slides. Standing in one place for eight hours straight is not natural for our bodies either, so working at a standing desk has some benefits, but you want to make sure to get plenty of walking movement throughout the day as well if you are doing that.

There are many different treadmill desks on the market now. TrekDesk is one that a lot of people like, but there are a lot of different options at this point.

Sitting on a balance disk can be a good option because it forces you to make micro-movements that actually increase caloric expenditure and also improves posture. I like the Fitterfirst balance disk. You can put that on top of your chair. Sitting on a yoga ball has a similar effect. I'm sure you've seen these in yoga studios or elsewhere. You just want to make sure that the sizing of the ball is appropriate ergonomically for how you are positioned at the computer.

Then, there are some apps both for iOS, Android, Mac, and PC that can remind you to take frequent breaks. The one that I like the most—I'm a Mac user—is called Time Out. The one on the PC I don't have any experience with, but I've heard it works pretty well, is called Workrave. You can configure the settings however you like on these apps. I have mine set up so that there is a five-minute break every 50 minutes, and then there is a microbreak every 15 minutes that is just for 15 seconds where I look away from the screen, maybe get out of my chair, jump up and down a few times, and get back in my chair, so these can be really, really helpful tools.

Equipment Recommendations

Push Up Handles

Pull Up Bar

Powerblocks

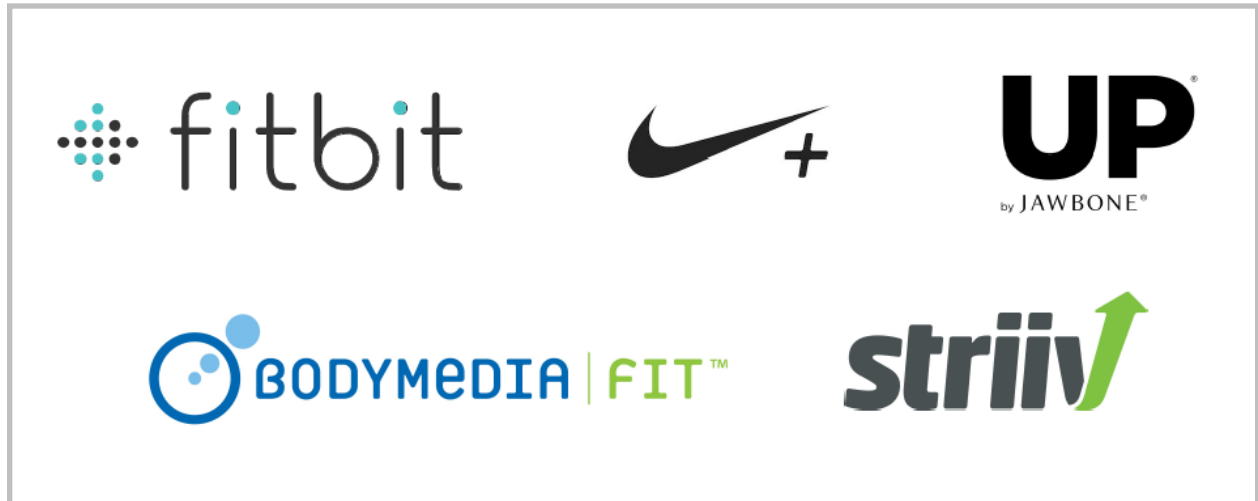
Abdominal Wheel

Weight Bench

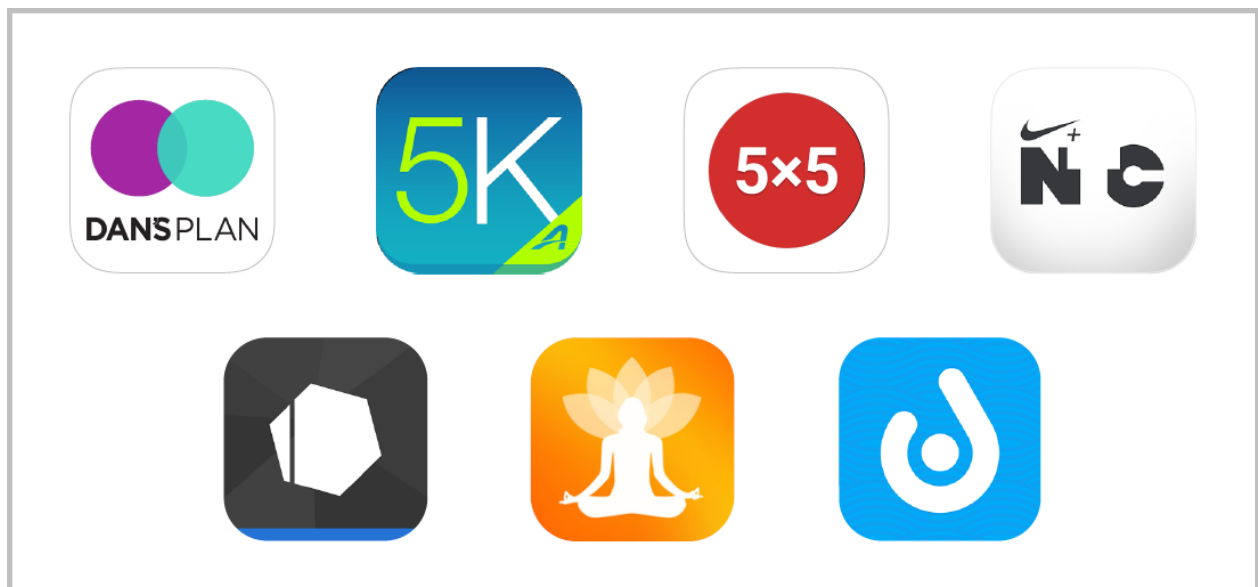
Weight Vest

Suspension Trainers

In terms of equipment recommendations, there are a lot of different options that make things easier doing body weight type of exercises at home. These are all relatively affordable and easy to store away in your home office or somewhere else in your house or even at your office outside of your home. Push-up handles; pull-up bars; power blocks, which are pretty neat weights that are configurable with different amounts of weight; an abdominal wheel; weight bench—obviously that one takes up a little bit more space; a weight vest for making push-ups more difficult. Then, finally we have suspension trainers. These are straps that you can hang from a door or some other stable structure such as the Jungle XT or TRX straps.



There are also a number of hardware devices that can help you to track your progress. Fitbit is probably the best known. It's a pedometer that tracks your steps throughout the day. There are also some sleep-tracking functions. Nike+ FuelBand, Jawbone's Up, BodyMedia FIT, and Strive are other options.



There are a number of fitness apps that can be helpful, many of which work in conjunction with the hardware devices that I just mentioned. Dan's Plan is a web app created by Dan Pardi, who created the Enduring Mover Framework and SWAP concept that we've been talking about throughout the physical activity presentations. Couch to 5K includes three workouts per week, moving up to being able to run a 5K. StrongLifts 5x5 tracks strength training workouts. Nike+ Training Club has customizable fitness programs with tracking. Freeletics is an app that has body weight workouts from 10 to 30 minutes long. Yoga Wake Up has a 10-minute yoga sequence for every morning, and

Daily Yoga has more than 50 different yoga classes available, so these are all great options depending on what your patients or clients are interested in.



I mentioned in another presentation that minimalist footwear is ideal for physical activity, and there are a lot of different options here now. Vibram FiveFingers are kind of the original entry into this market, but now we have other companies such as Vivobarefoot and inov-8, and even more traditional shoe manufacturers such as New Balance, Merrell, and Patagonia have minimalist options.

As a final note, it's best to encourage your patients and clients to start with small steps. So often what happens with behavior and lifestyle changes, people overcommit, and then inevitably when they aren't able to meet their goals, they get frustrated, and they stop. It's much better to start with very achievable, small micro-goals that then can increase the chances of success and then increase the likelihood that they will stick with it. You want to encourage them to look for ways to slowly increase their activity within the context of their daily life, remind them that they don't have to exercise vigorously every day. They don't need to go to the gym and run on the treadmill every day. Two to three days per week of the more intense activity is plenty for most people if they have a higher amount of background physical activity throughout the week. I also suggest that people find something that they enjoy doing that involves physical activity such as playing a sport, playing tennis perhaps, rock climbing, or something like that because they are much more likely to stick with it if it is something they enjoy doing above and beyond doing it just for the physical, emotional, and psychological benefits. Finally, again, working movement into daily life so that it is really something that they don't even think about is the best method and approach for overall health and longevity.

Okay, that's it for now. See you next time.