Introduction to mortality and fitness

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So what they found, again with careful measurement, was the people who had The best balance and agility, lower body strength, and cardiorespiratory fitness had the best improvement in all-cause mortality.

And the folks in the highest ranking on those three studies outperformed the people on the lowest ranking for all cause mortality by about 60%. That's an enormous improvement.

So the most fit versus the least fit. Have you made it past menopause, or are you going through it now? I'm Dr. Pat McShane, and on the Women's Health Span Voices podcast, I'll guide you through the health challenges of the menoppausal years and beyond, guiding the way to thriving in this powerful era of your womanhood.

I thought I would just mention a couple of things that have come up in the recent literature. One is a study looking at prolonged sitting. In other words, just sitting in one spot for a while, whether that be driving or watching TV or working in front of the computer or chatting with friends.

Podcast intro and recent research highlights

And this prolonged setting was associated with an increased risk of cancer in a very large study based out of UK biobank data. Another study looked at people who had the fastest walking speeds in their 80s, and they had evidence of reduced risk of dementia.

Some of the changes that occur in the brain were seen less frequently in those individuals. So, again, this is a goal that we may have to have fast walking speed in our 80's.

Let's move now to talk about one of the two studies that I thought was the most impactful, and that was on bone health. And this is a study based out of Semmelweis University in Budapest.

It's a review study, which means that they used data and studies collected by other researchers and reviewed them for certain aspects that were looking for to try to learn more about physical activity.

What they found was that the kind of physical activities that involved a lot of quick movements and impact helped to increase a marker in the bloodstream of the individuals who were measured that's associated with bone density, and that is osteocalcin.

Bone health and impact exercise

It takes a long time to actually see the impact of any activity on bone intensity, but if we can measure the markers that are likely to improve bone-density, we're halfway there.

So that is what they did. And they found that the kinds of intensity with impact and changes of direction and the activities that involved a lot of forward and back, side to side motion and impact were associated with a higher level of the osteocalcin in the bloodstream of those individuals.

Conversely, the people who were doing exercises such as walking or swimming or even resistance exercises, we typically think of it in a gym, did not have a significant rise in the osteocalcin.

So this kind of goes along with some of the older data about the athletes who have the most impact on their bone

density being those who do the highest impact sports.

So, and we know that walking is better than being inactive, certainly. But bicycling and swimming don't have as big of an impact on our bone density scores.

So this is a take home here. If you're inclined to do sports such as pickleball, handball certainly soccer or high intensity running, that is likely to have a better impact.

On your bone. Density. I would also refer you to a previous podcast with Kathy Basil from the organization Osteostrong. And Oesteostrang has devised four pieces of robotic equipment that place load on particular spots in your skeleton that are the most important for building bone density and the Preliminary data from these kinds of exercises shows that bone density in the sites that we care about the most, such as our hips and spine, are improved by these high loading, osteogenic loading is what they call it, kinds, of equipment.

So something to consider. The other study that I thought I would review in some depth came out of Taiwan, and this was an observational study over about a seven-year time frame with older adults.

These folks were mean age of 65 and more than half were women. And they assessed the fitness level on a number of different tests that were performed by the study investigators themselves.

And what they found was that certain domains of fitness were way more important than others in what's called all-cause mortality.

Fitness domains and all-cause mortality

An all cause mortality is the total number of deaths from any and all causes within a specific group of people over a set time. And it includes deaths, from diseases, old age, accidents, and violence.

So what they found, again with careful measurement, was the people who had The best balance and agility, lower body strength and cardiorespiratory fitness had the best improvement in all-cause mortality.

And the folks in the highest ranking on those three studies outperformed the people on the lowest ranking for all cause mortality by about 60%. That's an enormous improvement.

So the most fit versus the least fit. So again, balance and agility, which again has not been emphasized so much in much of the material that I've been seeing over the last 15 or 20 years about physical activity, but it's so critical for fall prevention.

And just to help us to stay active. Lower body strength, again, this emphasizes the idea of doing resistance training besides just the aerobic training.

And of course, the anaerobic piece is in here as well. We've known for a long time that aerobics exercise where we get our heart rate up does improve our cardiovascular mortality and others, as I mentioned at the beginning.

So what's the take-home message here? Well, as we started out discussing, all physical activity is good. The more, the better to a certain point. Most of us aren't going to reach that threshold, so I'm not going emphasize that today.

Many of are on the lower end of the threshold. So we're trying to get up into the medium to high level of physical activities rather than avoiding the very, very high-level where certain things actually do diminish or even get worse.

So all physical activity is good. It's good to do a combination of things besides just the walking that you might be most comfortable with. Do add in some resistance, add some balance work.

And if possible, some higher intensity exercise. There's a lot of good data about high intensity interval training, which is pushing as hard as you can for a short while and then backing off.

That's been shown to be associated with a number of outcomes. And exercise snacks, which we've talked about before on these podcasts, break up your sitting or your relatively sedentary activities with intense activity, maybe walking up a couple of flights of stairs or doing some squats.

That kind of intervention makes a big difference in your overall health.

Key takeaways and closing remarks

One thing I would caution is, especially if you already have issues with bone density, is to consult professionals before you just randomly start off trying to play pickleball, for example, or take up soccer at our advanced stages.

There's probably not going to be many people who want to do that. but having a trainer or a coach or an instructor and also checking in with your medical professionals about what kinds of things might be the most advisable and inadvisable for your health.

So I hope you got some good ideas from this talk today and I look forward to seeing you again. Please let your friends know about this good information to help us have the longest, healthiest lifestyle life expectancy that we can.

Thanks. If today's episode spoke to you, follow the show and share it with a friend ready to take charge of her health. And please leave a review. It helps more women find us.