

Curatio Connects podcast with Marianne Vipond

[00:00:02] (Robert) Hi, welcome to Curatio Connects, a podcast about health, wellness, and staying connected. On this episode, we're going to take a closer look at some of the science behind body movement with Kinesiologist, Marianne Vipond.

[00:00:17] (Marianne) In Kinesiology, we tend to look at the body as a whole as well and kind of analyze how you move and what your posture looks like and try and build you a program and have it evolve so that we can correct those imbalances to help you feel better and have less pain as well.

[00:00:34] (Robert) Marianne Vipond coming up. This podcast is brought to you by Curatio, the private social network for health used in over 85 countries. Find out more about our app called Stronger Together, designed to help you cope and thrive during Covid-19. You can download it for free from iTunes or Google Play. And for more about Curatio, visit us online at Curatio.me. Now onto our guest for this episode, Marianne Vipond, I spoke to her from her office in Montreal.

[00:01:03] (Marianne) I have a master's degree in kinesiology from University of Montreal. Sports has always been a big part of my life, and that's kind of how I got into the field of kinesiology. I thought it was representative of what I was looking for in a career and close to the values I have, and working in health care and helping people through exercise is something that's really important to me and that's kind of how I got to that. Presently, I'm working in cardiac rehabilitation with people who are also suffering from chronic pain. So those are the two main types of clientele I work with. For cardiac rehabilitation, I'm working with people who have heart disease. So, you either had coronary artery disease, arrhythmias, heart failure, undergone certain procedures like having stents put in or bypass surgery or who have even had a heart attack. My goal is to help them kind of regain confidence and moving through, you know, a safe exercise program and also educating them on the benefits of exercise and how exercise can help with their risk factors for heart disease and how exercise can help manage them as well. I also try and encourage them to stay active and kind of work on maybe the fear of moving as well. Because, you know, a lot of the times people who've had a heart attack, you know, are always worried, well, am I going to have a second one if I if I do too much? But our goal there is to really encourage people and let them know that, you know, it is safe to exercise, and it really outweighs the risks and the benefits are definitely there. With chronic pain, it's usually people who have had pain for a while, either due to injury, neck, shoulder, back, knee, and who have seen, you know, multiple health professionals. But the pain is still, still there. I do work alongside occupational therapists and physiotherapist to kind of help those people kind of cope with their pain on a day to day basis and help them understand that it is still good to stay active and do things even though you do have pain, because, you know, if you don't move, then that kind of has a tendency of increasing your pain and also decreasing your physical condition. So I do try and educate them a lot on the importance of moving, but, you know, trying to pace their activities and giving them strategies on how to manage their pain while still being active and things like that, so they can return to maybe a more functional lifestyle. So, you know, injuries, fibromyalgia or even other clients who have pain but don't necessarily know the cause of their pain. They usually come and see me as well because they've tried, you know, a bunch of health care professionals, but yet haven't necessarily seen any improvements. So, I do work with them as well.

[00:04:20] (Robert) So can you talk a little bit about, for those of us who don't really know exactly what kinesiology does, can you talk a little bit about what the science of kinesiology is and also what your job is as a kinesiologist?

[00:04:31] (Marianne) Yeah. So, a lot of times people don't necessarily know what it is. I get a lot of questions because it's a fairly relatively new field. So basically, kinesiology is the study of human movement. We use exercise to help people with chronic health conditions. So, we're basically the health care professionals specializing in exercise science. So, we have a university degree in exercise physiology, kinesiology, there's different terms for it depending on the universities. But it's a university degree and we use movement and exercise to help people, you know, prevent certain health conditions like heart disease, diabetes and also who have those conditions kind of deal with it through movement. And we also work in sports performance, you know, helping people develop their skills in strength and conditioning to better do their sport, basically. So, our field of practices is pretty wide. We do work with a wide variety of clientele.

[00:05:38] So we can work with kids in teaching them, you know, different skills in motor development. So, learning how to run, jump, catch, throw, things like that. We can also work with an elderly clientele. So, helping them maintain their independence and helping them build their strengths to prevent falls as well, because that is a risk factor among the elderly.

[00:06:01] So we do work with that type of clientele as well to keep them active. As well as with health conditions like heart disease, diabetes, cancer, people with chronic pain, like I was mentioning earlier, like fibromyalgia injuries. So, it is a really big scope and normally we do, you know, an initial assessment to kind of see what your physical activity level is. And we'll ask you, you know, what you enjoy doing, what your goals are, kind of, you know, go through your history with you and we're going to work with you to build a safe and effective exercise program to get you started on your path to a better health.

[00:06:40] And, you know, a lot of it is education on how exercise can help you and tools to stay motivated and things like that, so you are able to reach your goals in a safe and timely manner. And, you know, we're always there to encourage you step by step. And, you know, we modify your exercise programs just to keep things interesting. So, you know, it's really exercise and helping people kind of deal with their health issues.

[00:07:08] (Robert) Let's say I was seeing you and seeing a physiotherapist, What are the two, how do the two different roles split out or how are they different?

[00:07:15] (Marianne) So definitely the two fields kind of collaborate together. You know, if you were initially, you have an injury, you would go see a physiotherapist. So normally a physiotherapist would kind of see you in the acute phase vs. a kinesiologist. You know, once you've kind of passed that first step of rehab and you're able to work on your general physical conditioning, then we can kind of, you know, collaborate with the physiotherapist and help you get back to your fitness goals or your sport or whatever.

[00:07:47] So we do work together, you know, depending on the kinesiology degree. I know in Quebec we don't have any manual therapy in our degree, at least at University of Montreal. So, it's really the science behind exercise, anatomy, physiology. So, there are maybe some kinesiologists who can offer manual therapy as well, but they may have had another degree associated to their background.

[00:08:14] (Robert) Nice having that science expertise in the room, though, to be able to help you understand how your body works and what the movements, what's actually happening when you make the movements right?

[00:08:23] (Marianne) For sure, for sure, and you know, a lot of people who have certain health conditions don't really understand how exercise can help them. And they may be wondering, well, you know, I can't do this, or I can't do that. You know, my back really hurts when I bend over or, you know, my knee, I can't go up the stairs and it's been like that for years. But a lot of times, you know, if they start moving, a lot of those problems tend to improve.

[00:08:51] And, you know, you want to respect that person's limits and their pain threshold because you don't want to push too much either at first. So, you know, you really want to dose your amount of physical activity at first and progress gradually. But a lot of the time, people are somewhat amazed as to how powerful it actually is and the benefits that it brings.

[00:09:11] (Robert) And it doesn't have to be, I guess, when people think about, you know, physical exercise or a workout, they think about going to the gym and doing all the sort of heavy lifting. But really, what you're talking about is even simple movement to help you just continue to move through the day so that your body doesn't sort of go into this relaxed shutdown mode.

[00:09:29] (Marianne) For sure, for sure, I mean, you know, we're meant to move we're not meant to be to be sitting hours and hours. And I think there is kind of, I don't know if I should say stereotype, but this type of thinking where it's no pain, no gain, in more like the gym fitness mentality where, you know, you really want to push, push, push to your limits, but it's not that at all. You know, you don't have to push your maximum in order to see the benefits on your health, you know? The benefits are achieved doing a moderate intensity workout. So, you know, if you are an athlete and for a certain exercise, you need to push your limit, that's fine. But, you know, if you're kind of someone new to exercising and you haven't been moving, then I don't recommend doing something very hard. You know, just starting off light and having a moderate pace is really what's going to be the most beneficial for you.

[00:10:25] (Robert) So, you know, that sort of leads me now to talking about the situation we're all finding ourselves in with the Covid-19 pandemic and the fact that, you know, we're physically restricted from doing the things that we used to do. And those are starting to change over time and, you know, they're changing week to week. But there are limits on what we can do in terms of moving and in terms of exercise and in terms of just generally getting around. So, what kind of challenges are you seeing right now with Covid-19?

[00:10:53] (Marianne) I think, you know, the biggest challenge is, in fact, that gyms, fitness centers, fitness studios, community centers, pools, all those spaces where you would normally go to move and participate in exercise classes and things like that are closed. So, I think it may lead people towards, you know, having a more sedentary behavior because they might think, okay, well, I don't have all that equipment at home. There's not really much I can do, I can't really go out, this is closed, that's closed, what is there to do? And, you know, we do know that we don't want to be too sedentary because, you know, studies have shown that independently of how much you move, how much you exercise, the amount of time you spend sitting can increase, you know, the mortality rates for all causes and cardiovascular disease. So if you are at home and you do see yourself being a lot less

active and if you're working at a desk all day, you know, I would tell you to just find tricks, like stand up as often as you can, just get your legs moving, get the blood circulating, because, you know, you don't want to be in a static position for too long, and that's applicable now as it is if you work in an office when you go back to work. And I think it's, you know, also with team sports, team sports have stopped as well. So, a lot of kids might be wondering what they can do. But, you know, just going outside, kicking a ball around, playing catch with a parent or friend, still keeping your distance away from each other, that's still something that you can do. And there has always been, you know, tools online and videos you can follow for different exercise ideas. But now we're seeing even more of that. So, a lot of businesses have been turning towards, you know, Facebook, Instagram, Zoom to kind of post exercise routines for people to do in their own home and also, you know, showing them that you don't need all this gym equipment to move and to exercise. All you need is maybe a mat and a chair, you know, for older people with balance issues, you can still move, you have a chair, you can have upper body movements. There are ways to adapt, exercise routine so that it is, you know, comfortable for you to do at home and you can also see the benefits. If you are new to exercising and you feel like it's something that you want to start just to make sure everything is okay healthwise with the health care professional, you know, don't be afraid to ask for advice and things like that.

[00:13:36] (Robert) I guess too you know, part of the problem that we're all having is that because our routines have changed and we're not doing the usual things that we do, it's almost easy to get stuck just sitting in the house and not doing anything, not moving around. So, is establishing some kind of exercise routine or even just the idea of getting up every 20 minutes and moving around? Is that the kind of thing you would recommend that people do?

[00:13:57] (Marianne) You know, we do like having our routine and things have all changed recently and it is hard to kind of find a groove. You know, if you do find yourself kind of sitting at the computer browsing online or, you know, watching a few episodes on Netflix, then one trick could be before the next episode starts, just get up and around, get a glass of water, come back and watch the next episode. But it also helps if you kind of dedicate a time, a specific time each day and you respect that time and you tell yourself, okay, well, it's five, my work is done, I'm just going to either go outside for a walk, do a yoga routine, just anything to kind of get to get you moving and just stretch those muscles because, you know, if you don't use it, you do lose it and it's something that does build up over time. And if you aren't as active now as you were before, then, you know, once things get back to normal, somewhat normal, you will have a harder time maybe finding your groove again vs. if you're finding tricks now to kind of just maintain what you gain so far, then it's going to be a lot easier for you to find your old routine again.

[00:15:16] (Robert) That's a bit like when you go on vacation and you stop doing all the things you normally do and you come back and go, "Oh okay, I guess I better get back to doing that stuff!", you know, it's not a vacation, this isn't a vacation we're on, but it's going to be the same result if we don't do the exercise and do the work, right?

[00:15:30] (Marianne) Yeah. You know, your cardio, you can lose it fairly quickly within a couple weeks and you can definitely see differences in your strength as well. If those qualities haven't been maintained and if you've been, you know, inactive for a while. So, it's definitely going to be harder to get back into your routine afterwards if you have kind of just been sitting most of the time.

[00:15:54] (Robert) So can I ask you a little bit about sort of components of physical fitness and sort of the exercise recommendations that you, you know, sort of the basic blocks that you would talk to people about or that you would recommend we think about?

[00:16:08] (Marianne) Normally we kind of look at four components of physical fitness. So you have body composition, which is the relative amounts of muscle, fat, and other parts of the body. Ideally, you want to have your body mass index, which is the ratio between your height and your weight, between eighteen and twenty-five, that is the norm. And you know, a way to kind of evaluate your body composition, too, is we use waist circumference. So, for men, you'd want to keep a waist circumference below one hundred and two centimeters, which is 40 inches, and for women below eighty-eight centimeters, which is thirty-five inches, because that's kind of like the cut off where we determine, okay, if your waist circumference is above those values then you do have increased risks for developing heart disease, diabetes, and other health conditions as well. And one way to kind of keep that part of your physical fitness in check is a lot with diet, healthy eating and obviously exercise. It helps, you know, with your weight management and things like that. So, the next component of physical fitness that we'll look at is your cardiorespiratory endurance. So that's your body's ability to bring oxygen to your body and your muscles. So, an example of that would be if you were to go up and down the stairs, that requires a certain cardiovascular endurance. So, to improve on that component, any type of cardiovascular exercise is good. So, walking, biking, swimming, jumping, running, anything that'll get your heart rate up is a good exercise. We call it aerobic exercise, which will develop your cardiovascular endurance. The recommendations that we give people are to try and achieve one hundred and fifty minutes a week of moderate intensity physical activity. So, when we define moderate intensity, we can kind of evaluate it on a scale of one to 10 roughly. So, you know, say one is you're doing very light chores at home and 10 is the maximum effort you're exerting. You kind of want to be somewhere between four and five on 10. So, your heart rate is higher, but you're not overly exerting yourself and you can still maintain a conversation. So that can be a good way to gauge how hard you're working if you don't have a heart rate monitor, things like that.

[00:19:00] (Robert) Okay, that's a good rule of thumb then. So, what are some of the other components we should be aware of?

[00:19:04] (Marianne) Yeah! So, there are two more that we look at. So, we have muscular endurance and muscular strength. So muscular endurance is your muscles ability to perform without fatigue and muscular strength is your muscles ability to exert force. So, for example, if we need to lift and carry grocery bags, that would be kind of considered as using your muscle strength and endurance. So, you know, if someone has a hard time carrying grocery bags, then we know that that's something to work on because it is important for you to be able to have a certain muscle endurance and strength in order to complete your everyday tasks and also in order to move better as well. And, you know, we recommend doing strength training exercises, resistance training exercises at least 2 times a week and that, you know, you can use your own body weight if you have dumbbells, kettle bells, elastics, you know, there are a bunch of different things, Swiss balls too. There are a bunch of different exercises you can do in order to develop your muscle strength and endurance gradually as well so that you feel, you know, stronger and more confident in what you do and it makes your everyday tasks easier as well.

[00:20:27] (Robert) So those recommendations that you suggested, you know, how much we should do and how often, those are really the you know, the basic level, right? Those

are what we normally should be doing, a normal person who isn't, you know, an athlete, just a regular person.

[00:20:40] (Marianne) Yeah, yeah, for sure, to get, you know, the health benefits on those physical components for sure. And you know, when you're doing an exercise routine, you want to make sure to kind of have, you know, the cardio, the strength, and also stretches. So, flexibility is also another component that we kind of group into your physical fitness when we do evaluations, and that's the range of motion that's in your joints. So, for example, if you need to bend over and tie your shoes or get in and out of a car, that requires some flexibility as well. And, you know, flexibility might be a component that people kind of push aside because a lot of people find it boring just doing stretches and things like that. But it is something that is important and like anything else, as we age, it kind of decreases as well. So, you do want to incorporate stretches into your routines and to really see a difference in your flexibility, you'd have to do stretches at least five times a week holding them for 60 seconds.

[00:21:44] (Robert) So can you talk a little bit about the you know, what the gains are, what the benefits are for, you know, having a, you know, a routine and keeping up with my physical exercise? Like, what am I doing that's good for me? What are the benefits of that work that I'm doing?

[00:22:01] (Marianne) I mean, there are a lot of benefit. I think I'll concentrate more on your heart, the brain, and your muscles and joints because those are maybe the main aspects of the body system that we think about. So definitely, you know, it's going to help your heart. So, your heart is, you know, what keeps you keeps you going. It's what beats the oxygen into your body and it's what gives nutrients to all the different organs in your body. And we don't necessarily think of it as a muscle, but it is a muscle and it has to be trained like anything else. So, you know, there are ways for us to evaluate how efficiently your heart is working so we can evaluate your cardiovascular capacity with either a walking test on a treadmill or on the ground or depending, you know, if you have certain heart conditions, then they do an electrocardiogram (ECG) and you know, you can see what your ejection fraction is as well with other tests and your ejection fraction is basically your heart's heart efficiency at pumping the blood. So, if your heart, you know, is kind of out of shape, then you know, it has to beat faster to pump the blood in your body. And if you train your heart with aerobic exercise, you know, like walking, rowing, running, anything that'll get your heart rate up, it's going to help strengthen it. So, you know, for certain tasks, say like gardening, you won't be working as hard and your heart is going to be more efficient at pumping the blood and you won't feel as tired either, doing your day to day activities because you'll have more stamina. So that is, you know, one good reason to work on your cardio. These days too, we're in a really fast paced work environment and there's a lot of pressure and a lot of stress and, you know, we don't necessarily notice how stress affects our body, but it does. That it creates, you know, an increase in heart rate, your breathing pattern changes, you know, you might not be breathing as deeply as you should, you're using your superficial breathing muscles more, lots of tension, you know, maybe in your neck, your shoulders, if you're working at a desk and doing a high pressure job. So, you know, all these factors are kind of limiting your health. But, you know, exercise definitely can help you cope with the stress in your life and help you kind of relax your body and find a better balance as well.

[00:24:44] (Robert) Okay, so part important body system, what are some of the other ones that we need we should be thinking about or aware of that that we can we can work on?

[00:24:53] (Marianne) Well, obviously, muscles and joints. So, you know, we hear a lot of people who have injuries, joint pain, things like that. And all the resistance training exercises are geared towards helping you kind of work on your posture, rebalance muscles that could be, you know, tight or loose, and, you know, you might be having shoulder pain because, you know, muscles in your shoulder aren't working properly together. So just by having a specific exercise program adapted to your condition can really help, you know, minimize the friction that could be happening between your joints too. Like as we age, you know, life kind of throws a bunch of things at us and you might be moving less and less, but it will help you kind of reduce the friction that's in your joints. In kinesiology, we tend to look at the body as a whole as well and kind of analyze how you move and what your posture looks like and, you know, try and build you a program and have it evolve so that we can correct those imbalances to help you feel better and have less pain as well.

[00:26:07] (Robert) Okay, so we've covered heart, we've talked about muscle and joints, the other one was your brain, I believe.

[00:26:14] (Marianne) Yeah, the brain. So, it's definitely beneficial for your brain. So, when we exercise, especially aerobic exercise, we do see that, you know, more endorphins are produced and that's kind of like the feel good hormone that's there and it's something that can make you feel happier and relaxed afterwards. So, you know, you might have had a really stressful day and you just kind of need to let go of some of that energy and, you know, after you've done maybe like jog or things like that, you kind of feel like a sense of relief and happiness and those are the endorphins kicking in. So, it does really help balance your mood, you know, we also see increases in dopamine, serotonin, the neurotransmitters as well, that help regulate mood. And you know, it does help you cope with stress. And in certain conditions too where, you know, memory might be an issue like dementia and Alzheimer's disease, exercise can also help prevent and decrease the symptoms as well, because it does stimulate the hippocampus, which is the area in your brain associated to learning and memory. So, you know, just by doing 20, 30 minutes of moderate aerobic exercise does actually have beneficial effects on your memory and learning long term. And you know, another thing these days a lot of people are talking about is the anxiety and depression, you know, being home and not being able to go out. And, you know, you're feeling a lot of different emotions and you might not know how to cope. But exercise plays a key role by the fact that it can help you deal with those emotions of depression and anxiety, relieve stress, and it can be kind of an outlet to what to what you're feeling.

[00:28:15] (Robert) Yeah, so any of these exercises you've been talking about would be helpful for the brain. There aren't specific exercises that I would need to think about for my brain. You're basically saying if I'm doing a little bit of work, getting an exercise, going for a walk, whatever it is I'm doing, I'm creating those chemicals that will help in some cases make me feel better, make me feel less stressed, just make me feel a bit more relaxed.

[00:28:36] (Marianne) For sure, I mean, definitely aerobic exercise has been shown to have those benefits. But, you know, if you're working on resistance training as well, you have exercises that require more coordination, more balance, more agility those are all things too that can kind of get your mind off what you're thinking and focusing on a certain task as well and it can also kind of help you just change your mindset for a short period of time and, you know, feel more relaxed afterwards and maybe help you get through the day as well.

[00:29:07] (Robert) So that sort of leads me to the question I had around motivation, because if you are feeling a bit anxious or stressed because of what's going on, some people have a natural tendency just to withdraw, right? And not want to go out, they just pull away. So how do we keep motivated? How do we keep pushing ourselves to get some exercise even in the best of times? But certainly, right now, under these very odd and restricted times.

[00:29:33] (Marianne) For sure, and you know it's not easy. That's one of the main barriers to exercising is motivation, it's hard for everyone. It's something that takes time and dedication. And, you know, that's our role as kinesiologists is to kind of help people get over that barrier of motivation. And what we tend to tell people is to have a smart goal. So, it's an acronym where you want your goal to be specific. So, it has to be something that's specific to you, you know, what you want to work on, and you don't want it to be too vague either. So, if you say, I want to improve my health, well, more specifically, what do you want to improve on? Is it your flexibility? Is it your cardio? Is it decreasing your pain? What is healthy for you? So, once you kind of narrow what you want to work on and that can kind of help you focus. You also want to be able to measure it. So, keeping a journal of your progress is also a really good motivational tool. So, you know, you keep track of the number of repetitions you're doing, the number of sets, the duration of your exercise sessions. So if you see that you're progressing or you're able to do more sessions in a week, say you start with once or twice a week building up to three, four times then that's a really good way of measuring, okay, well, I'm on my way to getting better into improving my goal.

[00:31:09] You also want to be relevant, or achievable sorry, achievable. You want to be realistic and attainable. So, you know, if you haven't really exercised before and you think, okay, well, I want to run a marathon, that might not be realistic at this moment. So, find something that, you know, according to your physical condition is achievable. And you can work towards your ultimate goal with smaller goals as well. And relevant, you want this goal to be important to you and you want it to be something specific to you. You know, if your friends are suggesting, oh, let's do a yoga class, but you really don't like yoga, you find it too slow, it's not something that you're going to enjoy, then it's not something that you're going to stick with. So, you do want to choose something that you want to enjoy, that's going to be fun for you to do, because that's what's going to motivate you to do it again and again. And you also want it to be in a realistic time frame, so, time bound. You know, if you say you want to lose 30 pounds in a month, that might not be the right timeframe. Because you do want to respect the physiological components in your body and the systems and everything, and a rapid weight loss isn't good for your health anyway. So, you know, to say losing 30 pounds in a month, I would say, you know, in a month you could probably lose around five pounds, which respects the functions of your body and isn't going to stress your body too much with the weight loss. So that's kind of, you know, the tool that we use to help people set their goals and these days, online is really the way to go.

[00:33:02] So if you do want to exercise at home, you know, you can reach out to your friends, kind of set a time to book a group training session virtually with your friends, you can do that. You know, if you have kids, you can kind of set a time as well, either to go outside or try an exercise video together. There are videos out there that are geared towards, you know, parent kid exercise routines to give you ideas, and keeping maybe a calendar on your fridge as well. You kind of put an X every day you do something and at the end of the month you kind of see, oh, well it wasn't too bad this month and I did a bit more than I wanted to and it's good and it can kind of help you keep on track.

[00:33:46] And obviously, I would suggest asking for help, you know? Kinesiologists are there, we're here to help. It's our job to kind of get you started and educate you on what you can do and safely exercising. The Canadian Kinesiology Alliance's Web site has a lot of information and can you know gear you towards each province's association so you are able to find a kinesiologist in your area if it's something that you are interested in doing. And I would really recommend it because it is worth investing in your health, there are really tremendous benefits. If you want to start likely you can, you don't have to start super-fast, I'd say just start walking 10, 15 minutes, three times a week and build it up gradually to four or five times a week and then increase the time to 30 minutes or more. And, you know, that already can be a really, really big goal to achieve and it's going to pay off for sure.

[00:34:54] Marianne Vipond, and the Canadian Kinesiology Alliance Web site she mentioned is at www.cka.ca/en and we have links to other resources on our web site at Curatio.me. This podcast and the Stronger Together app is brought to you by Curatio, the private social network for health now used in over 85 countries. The Stronger Together app is designed to help you cope and thrive during Covid-19, you can download it for free from iTunes or Google Play. And for more information about Curatio, including show notes and as I mentioned, more links to resources about this episode, visit us online at Curatio.me. For the team at Curatio and the Stronger Together app, I'm Robert Ouimet, thanks for listening.