

Angelica Ladd:

All right. Good evening, everyone. Hi, and welcome to the Healthy Living Series. I am Angelica Ladd, community relations specialist at Dartmouth-Hitchcock Health. This evening, we are joined by Dr. Kerril Hennessy, who will talk about heart health and how risk factors have changed since the pandemic began two years ago.

Angelica Ladd:

But first, I have a few housekeeping items that I just have to get out of the way, so I'm going to start with that. We have reserved some time for questions and answers at the end of our program. If you would like to ask a question, please use the Q&A function of the Zoom webinar. Tonight's event is being recorded and will be posted on our Healthy Living Series page at go.dh.org/hls, and it will also be posted on YouTube so you can watch it again or share it as you want to with friends and family. We also have closed captions available for tonight's presentation, so just click on the closed caption icon for live captioning.

Angelica Ladd:

At the end of the event, you will be sent a quick three-minute survey. We would be really grateful if you could just take a couple minutes just to fill that out because it helps us with future programming. So thank you in advance for doing that. I appreciate it.

Angelica Ladd:

Finally, we have some upcoming Healthy Living Series events planned for March. If you are interested in how nutrition impacts your health, register for our March 9th event, Back to the Basics: Food as Healthcare. If you would like to learn more about colorectal cancer screenings, then we have a comprehensive presentation coming up on March 22nd. And again, you can register for both of those events by visiting go.dh.org/hls.

Angelica Ladd:

All right, that's all the housekeeping and it's all out of the way, and now I would really like to introduce Dr. Kerril Hennessy, who is an assistant professor of medicine at Geisel Medical School at Dartmouth. She's also an attending cardiologist at Dartmouth-Hitchcock Medical Center, co-director of the cardio obstetric consultation service, and director of the Heart and Vascular Center's Quality Improvement Program. Her research focuses on questions related to the management of cardiovascular disease in women, healthcare equality, and equity within the field of cardiovascular medicine. Dr. Hennessy is board certified in internal medicine, cardiovascular medicine, echocardiography, nuclear cardiology, and cardiac computed tomography. Her clinical responsibilities include taking care of patients through the spectrum of their cardiovascular illness, from prevention to intensive care. As co-director of the cardio obstetrics consultation service, she provides specialized care for women with established or incident cardiovascular disease during pregnancy and beyond. Thank you so much, Dr. Hennessy, for being with us tonight. I'll give you the floor.

Dr. Kerrilynn Hennessey:

Thank you so much, Angelica, and thank you everyone for joining me tonight in this Healthy Living Series. I'm just going to share my screen and we'll get going. Angelica, just let me know if you can't see that for some reason. As stated so beautifully, I'm one of the attending cardiologists at Dartmouth-

Hitchcock. My name is Kerril Hennessey. I've been here for about two years now, so actually, I've been here for most of the pandemic. Tonight, we're going to be talking about rebuilding healthy habits and maintaining your cardiovascular health during the pandemic. If the slides will advance. There we go. Got it. Sorry.

Dr. Kerrilynn Hennessey:

So, outline for tonight. I want to start with where we were pre-pandemic with cardiovascular health in the United States, and then move into pandemic-related increased cardiovascular risk factors, as well as what we've noticed with decrease in preventative and emergency cardiovascular care. Finally, I'm going to move into some COVID-19 disease prevention and heart health, and end on 2022, how are we all going to rebuild our healthy habits.

Dr. Kerrilynn Hennessey:

So pre-pandemic, the cardiovascular health of the United States was not perfect. In fact, if you asked Americans how they felt about their cardiovascular health, about 39% of them thought they were in ideal cardiovascular health, but truth be told, only about 1% of people were ideal by all seven metrics. When we talk about metrics, what we're talking about are the AHA Life's Simple 7. These seven factors off to the left of my screen are the seven most important things that we think about and talk about whenever someone comes in for a cardiovascular visit. And so this is smoking behavior, diet, activity levels, weight, blood pressure, cholesterol, and sugar. This panel sort of shows our grading system, so to speak, what's ideal and what's poor. When we look, you don't need all seven to have great cardiovascular health. Actually, just having three or four ideal measures, it decreases your risk of a heart-related death by more than half. And considering cardiovascular disease is the number one killer in the United States, that's an enormous amount of lives saved by just focusing on these seven simple things.

Dr. Kerrilynn Hennessey:

Right now, before the pandemic, we had 42% of Americans with a BMI over 30. A BMI over 30 is classified medically as obese, and that is poor health in the weight category. For physical activity, prior to the pandemic, about 45% of people got no physical activity, meaning no exercise beyond their routine activities and daily living. Diet was the worst of the seven. The American diet is called SAD, the standard American diet, SAD, because all of us eat too much of certain things and not enough fruits and vegetables. We'll go through some of that, and I'm glad Angelica has mentioned the March 9th nutrition boot camp, because that would be an excellent way to get to the next healthy living series and start working immediately on one of these risk factors, because all of us have room for improvement.

Dr. Kerrilynn Hennessey:

So dietary choices. When we say poor diet and Americans not achieving dietary goals, what are we really talking about? 75% of people have a diet that's low in vegetables, fruits, and dairy. 63%, so more than half of us, eat too much added sugar. Almost 80% of people exceed the limits for saturated fat, and 90% of people exceed the limits for sodium. And sodium is a big one, because if you can get your sodium intake less than 2,300 milligrams a day, there is a definitive decrease in your risk of chronic diseases, not just cardiovascular disease. More than half of us, we get or exceed total grain and protein recommendations. So we eat enough bread and we eat enough meat and protein, but not enough fruits and vegetables and too much sugar and salt.

Dr. Kerrilynn Hennessey:

For this reason, what we've seen before the COVID pandemic is actually an epidemic of obesity in this country. These are graphs that you may have seen in other talks. From 2011 to 2020, the United States and the colors are percent of the population that meet the medical criteria for being overweight, which is a BMI over 25, or obese, which is a BMI over 30. In 2011, you can notice that the map is more green and yellow, which are lower percentages of people. As we get to 2020 ... and this is now before the pandemic ... we're seeing a lot more red, and that red color is getting one in three people are now meeting criteria for being overweight or obese.

Dr. Kerrilynn Hennessey:

And so we've got an increase in weight over time that predates the pandemic, but we'll talk about how the pandemic's behavior changes have really made this worse. Looking specifically in our area, the Upper Valley, Vermont, New Hampshire, in fact, we do okay. We're at the yellow level in 2011 and then again in 2020. But still, the yellow level is having basically one in three or one in four people having a body weight that's less than ideal.

Dr. Kerrilynn Hennessey:

So the pandemic really came out of nowhere, and this is a collage of things that we saw happening immediately with the stress of life's changes around that time. As I was preparing for this talk, I actually found quite a few headlines about behavior change throughout the pandemic, and here are some, just to give you a preface for what we're going to be talking about. NRP says, "One year on: Unhealthy weight gains, increased drinking reported by Americans coping with stress." "Obesity rates rise during the pandemic, fueled by stress, job loss, and sedentary lifestyle." "The pandemic has your blood pressure rising? You're not alone. Average blood pressure readings increased as the coronavirus spread, new research suggests." And, "You are not alone in eating more comfort food during the pandemic." So this is a preface of some of the science I'm about to show you.

Dr. Kerrilynn Hennessey:

Early in the pandemic, we saw an immediate decrease in physical activity. This is a graph taken out of step counts on a smartphone application. This is a free application that some people had downloaded and this is de-identified data, meaning they're step counts for a city. On the right, it tells you which cities and what color they are. And then over here in the graph, we're seeing step counts between 3,000 at the bottom and 6,000 at the top in a timeline from February 2020 to June 2020. And you notice that no matter what city you live in, your average daily step count has hit a peak and then crashed precipitously right at the beginning of the COVID pandemic. And the surprising thing is that the step counts don't recover when the shelter in place and regional orders were removed. The step counts are actually still below the pre-pandemic baseline.

Dr. Kerrilynn Hennessey:

This is another way of looking at the same data. This is a different patient population. The people in the prior graph would be people who are at home getting their step counts tracked on their smartphone. The people in this are people who have an implantable device, so they have a pacemaker or they have a cardiac defibrillator, and those machines can actually detect your average activity level. We can track how many minutes you're up and moving. And so the graphs are two different cities. We've got New York on the left, we've got Minneapolis-St. Paul on the right, and each color is a different year. So 2019 is the baseline, just to show that throughout the year it's pretty steady, the amount that people are

walking, and the cities are pretty similar. There's not really variation between New York or Minneapolis in activity level for these patients. So 2019 looks very similar. 2020, what we see is right at the dashed line where the pandemic begins, the activity level just crashes. And again, we see this slow recovery and it does not get back to our pre-pandemic baseline.

Dr. Kerrilynn Hennessey:

So when the American Psychological Association gave a survey to Americans asking about behaviors associated with the pandemic in the last year, 53% of people reported being less physically active than they wanted to be. That's one out of every two people. And the picture on the right may be familiar to you, the idea that people have been watching a lot of television and binging on shows and hanging on their couch. That's been a more common behavior with the physical activity restrictions early on in the pandemic and some of the changes in the availability of equipment in gyms and outdoor spaces. This is not anyone's fault. It's just we're seeing that people are less active now for a variety of reasons.

Dr. Kerrilynn Hennessey:

Physical activity is important. It's a predictor of survival. This is a curve showing mortality rate per 1000 adults per year. That's the y-axis here. Excuse me. So steps per day is on the x-axis. The people who are walking the least are up here. These are people walking 2,000 steps a day, and then it goes all the way up to 16,000 at the end here. And what we see is that there is a decrease in mortality. The line goes down as you increase your step count. So walking more keeps people alive. In fact, if you took your step count from 4,000 steps a day to 8,000 steps a day, you're going to decrease your likelihood of death at a year by 50%. These patients, when we look at them for a year, they are far less likely to die than those that are walking less. This is a very important measure of overall physical fitness and health.

Dr. Kerrilynn Hennessey:

Another pandemic-related behavior change is the increased demand for food delivery, and particularly comfort food. Some of the headlines that I saw when looking up the science behind food delivery was that Americans are eating like kids again and that comfort food is expected to continue beyond the pandemic. The industries that sell these foods are trying to forecast what we're eating based on what we're eating now. And what we're ordering off these food delivery services is not the heart healthy diet that I would want us all to be eating.

Dr. Kerrilynn Hennessey:

Look at the cravings report from Uber Eats. Our top 10 food delivery choices are french fries at number one, Pad Thai at number two. Go down to soda at number four, mozzarella sticks at number nine. I can't say I don't eat those foods occasionally, but we all know we shouldn't eat those regularly. There's an incredible amount of salt and added sugars in takeout, and I think on this report, the one most increasing order that we saw is that cheese fry sales increased by over 1200% during the pandemic. So people aren't ordering healthy food. People need comfort. This has been very stressful. But it's been two years, so we can't eat like this forever.

Dr. Kerrilynn Hennessey:

What we see with the food choices and the decreased availability of physical activity is that people are gaining weight. Now, this is a graph just showing the first month of the pandemic. It's only 28 days of time. I know the line looks a little bit flat. It's not the most impressive to go from here to here, but over the first month on average when we tracked weights with Bluetooth scales, people gained about a half

pound every 10 days. If that were to continue for two years in the pandemic, on average, people would be gaining 73 pounds over the last two years.

Dr. Kerrilynn Hennessey:

And what do we actually see? What are people reporting for weight gain? This is, again, that American Psychological Association survey, so this is self reports, meaning someone's calling or sending the paper or getting an email with survey questions. These aren't people weighing themselves. They're just reporting what they're noticing with their weight. 6 in 10 US adults report an undesired weight change, and that could be either weight loss or weight gain, but more people are reporting weight gain. The two that I've highlighted here are in all US adults, we had 42% of respondents report that they had an undesired weight gain. So that's 4 out of 10 people are having weight gain. The average weight gain reported is 29 pounds. That's a lot of weight for two years' time.

Dr. Kerrilynn Hennessey:

Men reported an even higher weight gain at 37 pounds to women, who were at 22 pounds. All the remaining categories are different age groups and ethnic groups. I'll bring you down to the other box, which is essential workers, of which I'm one. We are not immune to this. The stress, the junk food in the hospital, essential workers, 38 pounds of weight gain. And 50% of people that are classified as an essential worker on this survey are reporting weight gain.

Dr. Kerrilynn Hennessey:

How about cigarette smoking? Right now, pre-pandemic, I think one in every six men and one in every eight women smoke cigarettes in this country. It's still a thing that is a risk factor for cardiovascular disease, heart attack, and stroke. Diet affects more of us, but smoking is a very potent risk factor. So how did smokers do in the pandemic? Well, we saw two different trends. The graph on the left is talking about cigarette smokers thinking about quitting. The interest in quitting is increasing. This blue line says that about half, 41% of people that smoke, were thinking about quitting, increasing their interest during the pandemic. But when we look at the actual changes in the amount smoking, we have more people increasing smoking or staying the same than people who have quit or decreased. And so even though people are thinking about it, because of the fear, really, of getting COVID or becoming sick and requiring respiratory support, they're thinking about it but the change in smoke ... We're seeing somewhat of an increase because of stress and boredom and just free time.

Dr. Kerrilynn Hennessey:

And alcohol. Alcohol is another substance that we talk about for cardiovascular risk, largely because it causes weight gain. It's a lot of empty calories. Alcohol and food service sales, that's the graph that I'm showing you here. They're pretty steady over time. The orange is the alcohol that you would drink out in a restaurant or in a bar. The blue line is alcohol that would be consumed at home. These are just sort of unit sales from an industry website. And so the timeline for 2018, 2019, early 2020, it's very flat. Everything looks pretty consistent. But then again, the pandemic hits and no one's eating out or drinking out and people start buying more alcohol for their home, so the lines cross. After you can go out to eat again and that becomes a possibility, we see that still, the amount of sales of alcohol in the home have stayed up.

Dr. Kerrilynn Hennessey:

And so in this study ... it's from the Journal of Addiction Medicine ... it's showing that the average drinking days, so the number of days out of a week that people are drinking, has increased 20%. The number of drinks consumed when drinking has increased 10%. And episodes of binge drinking, which is ... we define it as consuming four or more drinks in any one sitting ... that has increased by 20%.

Dr. Kerrilynn Hennessey:

So our physical health has really taken a backseat, and it's taken a toll since the start of the pandemic. On top of that, we have delayed or canceled healthcare services. So we have people with increasing amounts of risk factors for chronic diseases or with chronic diseases that require care, and one out of every two people has either delayed or canceled a healthcare service due to the pandemic. I want to walk through what some of the consequences that we're seeing are from doing that.

Dr. Kerrilynn Hennessey:

This is, again, no fault of anyone's. This is a paper from very early in the pandemic where, as a society, our cardiovascular professional society wrote recommendations to keep both providers and patients safe from COVID. And a lot of the recommendations ... because this was an area where we were not sure how severe an illness would be and how infectious this was going to be, and there was no available mitigation strategy like a vaccine, the only thing we could do to mitigate transmission was to really cancel or reschedule elective procedures. So a lot of the recommendations for all of these very important cardiovascular services are to reschedule.

Dr. Kerrilynn Hennessey:

And we saw that that happened. Papers were written, hospitals restructured. Things that were elective ... it doesn't mean that they're not necessary. They're still necessary, but we waited on them. And so these are graphs showing some of our kind of core cardiovascular procedures and surgeries, and this is a group of hospitals putting their data together. The line here is every week, how many procedures were they doing. And so it kind of varies. It bumps up and down on a weekly basis, but it's pretty steady. And then we get to the first phase of COVID, the orange bar, and it just drops. And so COVID two, the next phase, it's a little bit higher, but again, it has not recovered to the pre-pandemic era. We're not doing as many surgeries, we're not doing as many stents.

Dr. Kerrilynn Hennessey:

And this is by individual procedure. These are all important cardiovascular procedures that have been delayed. This PCI means a stent to open a heart blockage. CABG is a bypass graft to open, or bypass, a heart blockage. TAVR and SAVR, the bottom two, those are valve replacements for an aortic valve problem. And so we're seeing that these procedures that are necessary were delayed. Thankfully, when this paper looked at how the patients did that were delayed, there was not an increase in mortality, meaning people did not necessarily die that were delayed, but there's a backlog of people who require care.

Dr. Kerrilynn Hennessey:

This is another graph. This is the Rand Corporation, so this is another survey looking at households and how you access car. And so the question is, "Were you unable to receive one or more types of care in the last two months due to the pandemic?" And if I show you from 2018, this line is our benchmark. So in 2018, all these little bars would have been down here, because less than 10% of people would say that they didn't receive one or more type of care, and most of the time, that was because of cost, not

because of the pandemic. But each bar is a different phase of the pandemic, and early on is the lightest purple, the middle phase is the dark purple, and then up to June 2021 is this orange. So early on, access was very restricted. Almost 40% of people here reported that they did not get care because of the pandemic. And thankfully, it's getting back down, but again, we're not at the level of 2018 yet.

Dr. Kerrilynn Hennessey:

So this is in total. 4 in 10 US adults report avoiding medical care because of concerns related to COVID. When this was all coming to light, I think the strategy of using public service announcements to really let people know that it was okay to come to the hospital, that the hospital was still safe, that we were doing things to try to prevent your likelihood of getting COVID by coming in, those started happening because we were seeing that people weren't coming, and then the people that were coming were coming late.

Dr. Kerrilynn Hennessey:

This was an article from very early in the pandemic from The New York Times. It was written by Harlan Krumholz, who's one of, actually, the cardiologists at Yale where I trained. This was an informal poll. It's a Twitter poll of cardiologists across the country, and this is from April 6, 2020, so this was only less than a month into the pandemic. People were reporting that their hospital was seeing 40 to 60% less heart attacks. And we all knew that the heart attacks, they were still happening. The concern was that people were staying at home or maybe even dying at home because they were too afraid to come.

Dr. Kerrilynn Hennessey:

And this is us kind of following that data over the pandemic. The map is every US state. The coloring is the brightest red is where COVID had the highest death rate, and the dark circles are late-presenting heart attacks. So the circles don't necessarily match up with where COVID was the worst, per se, which shows us that even when the hospital might have been open and beds may have been available, people were fearful. They didn't want to come in when they thought that they were sick.

Dr. Kerrilynn Hennessey:

And that's a problem because time is muscle. When you're having a heart attack, every hour that you don't come in is really a missed opportunity to get you better. This is a study from before the pandemic showing that ... It's comparing two things. People showing up after 24 hours of their symptoms, that's the red group, or less than 24 hours after their symptoms. And looking at the graphs, their clinical outcomes ... This is tracking deaths out to three years. So we see that all the red bars are higher than the blue bars, and what that means is that people who come late for a heart attack who wait more than 24 hours to come to the hospital, for the next three years, that results in an increased risk to your health, an increased risk of dying, and an increased risk of a recurrent heart attack. The people that were the most likely to delay coming in tended to be 75 or older, female, or have somewhat unusual symptoms, the atypical chest pain or shortness of breath alone, and diabetics.

Dr. Kerrilynn Hennessey:

And so this is important knowledge. We know that coming in for a heart attack, that's a timely thing. You need to come in as soon as you start feeling something. And we're seeing now, throughout this pandemic, this is looking at excess deaths. The blue bars are basically historic levels, expected numbers of deaths. The yellow is going to be the line where the expected is at the lowest. And the red, the line, is where if it's above that, it's truly abnormal. It's truly excess. And you can see, this is Vermont and New Hampshire, and we've got the little crosses above that red line several different times. Some of them are

right in line with where a COVID wave hit, but you can see it particularly in Vermont's graph. It's not necessarily just during a COVID wave that we're seeing an excess of deaths. We're seeing people sicker throughout this time.

Dr. Kerrilynn Hennessey:

That being said, COVID itself does increase your risk of having a cardiovascular event. This is data that was very recently published in Nature, and it shows patients who had a COVID infection and compared that to patients who did not have a COVID infection. The patients with COVID ... it could have been the person who got infected who was able to stay at home, who never required oxygen, never required any COVID-directed therapy. So that would be the mild case. Those were in the study, all the way up to patients who got sick enough to need the hospital and sick enough to need the ICU. They followed these patients for a year after their COVID infection and just watched what happened with their cardiovascular events. The events they were watching were cerebrovascular disorders, which is stroke; dysrhythmia, which is a change in your heart rhythm; inflammatory heart disease ... that's myocarditis, which we're going to talk a little bit more about ... ischemic heart disease, that's heart blockage artery issues; and then thrombotic disorders are clots.

Dr. Kerrilynn Hennessey:

So you can see this is a wide variety of things that we were tracking. The purple bars are patients with COVID, and they're having ... This is called a hazard ratio. So basically, their odds of having any number of these things is twice as much as those not having COVID. We've got higher in every category after having COVID, and in particular, this category of MACE, which is major adverse cardiovascular events, which is typically things like coming to the hospital for chest pain that is artery related, having a heart attack, dying from heart disease, having a stroke. These things lumped together, we're seeing in excess of maybe 20 extra people having those problems out of every 1,000 who had COVID.

Dr. Kerrilynn Hennessey:

Inflammatory heart disease, that's myocarditis, and I want to talk about that next because it gets a lot of news. Myocarditis is inflammation of the heart muscle itself. It actually happens after other viral infections, too. This is not a uniquely COVID phenomenon. But when you have COVID, your risk of getting myocarditis when you have that infection is about 16 times higher than patients who don't have COVID. And so it is an increased risk. The infection itself can cause inflammation, and we see that with the infection of COVID.

Dr. Kerrilynn Hennessey:

Also, there's been a lot of news about whether the vaccines cause myocarditis. This is a hot and very polarizing topic, but this is data from the Journal of American Medicine Association looking at the adverse event reporting systems for Pfizer and the Moderna. These graphs are showing how many people got myocarditis and after which dose, their first or their second dose. I'll draw your attention to the fact that the ages here are between 12 and 40. The reason they're not reporting out 40 through 140 are because above 40 years of age, there were only eight total reports of myocarditis after either vaccine, and the number's just so low that that graph would just be a flat line and twice as long. And so they're just showing the younger age groups because younger age groups have the higher risk for myocarditis in general. They could get viral myocarditis, COVID myocarditis.

Dr. Kerrilynn Hennessey:

The vaccines with myocarditis, we've got the peak, the most vulnerable people for that are 16 and 17 years old who got a Pfizer vaccine, particularly men who are at higher risk for these inflammatory conditions at baseline. But the percentage risk, if you think about the number of doses given for this ... There's about 130 cases out of 95 million doses given. The risk is very, very, very low.

Dr. Kerrilynn Hennessey:

This is one way the American Heart Association has sort of put together your risk of myocarditis against the benefit of vaccine. So predicted cases of myocarditis after vaccination, you can see all of the bars are very, very low, very small. If we're taking that risk ... If you're going to get the vaccine and take this small risk, what do you get as a benefit? Here on the left, you're seeing green bars, and the benefit is your prediction of the prevented hospitalizations from COVID. And as you get older, you're more likely to get hospitalized, so the predicted benefit from vaccination becomes even higher at older age groups. So this is a nice visual way to see the balance of the risk and the benefit.

Dr. Kerrilynn Hennessey:

Again, because COVID infection does increase the risk of cardiovascular events at least out to a year after the infection, in patients who were hospitalized ... and the ICU more so than mild cases ... but the risk does increase measurably even in mild cases. I think about vaccination truly as preventing, to some degree, this increased risk of cardiovascular events.

Dr. Kerrilynn Hennessey:

So it's 2022. We have a couple minutes before we're going to open for questions. What can we do? I've just walked you through a lot of data talking about before the pandemic, where the country was health-wise, how the pandemic really changed behaviors. It made physical activity harder to do. It made comfort food more appealing. It made people gain weight because of that combination of things. And so what are we going to do to reverse this?

Dr. Kerrilynn Hennessey:

It's really time now ... it's two years in ... to create or rebuild healthy habits and take control of your physical and mental well being. So we'll start with diet, because diet is something you can start with tonight, you can start with in the morning. It can start on March 9th with the Healthy Living Series on nutrition. We're going to get on track with healthier eating habits. I love this diagram because I think it's beautiful and it also shows a lot of healthy foods that I probably don't eat enough of. But this is all from the American Heart Association website. The idea is to eat colorful foods. I think we all know that fresh fruits and fresh vegetables are what we should be eating more of, but people are reaching for comfort food, and we reach often for carbohydrates and grains and things like that that are causing people to gain weight. So more vegetables, more fruits, less salt.

Dr. Kerrilynn Hennessey:

These six items here on the left, the salty six, these are very common items in the American diet. These are loaded with sodium and if they can be avoided, you will cut the amount of sodium you're eating substantially. If they are in your diet occasionally, that is fine. But breads and rolls, pizza, sandwiches, cold cuts and cured meats, soups, burritos and tacos, those are the most common foods in the American diet that are loaded with salt, and so we want to decrease these.

Dr. Kerrilynn Hennessey:

For fat, there are some good fats. There's healthy fats. They're unsaturated, they're poly and mono. There's examples here in this picture. Olive oil, salmon, avocado, nuts. And the benefit of these fats is that they actually lower your risk of cardiovascular disease and all-cause mortality, meaning they keep alive longer. They lower the bad cholesterol and your triglycerides, and they provide essential fats that your body needs but it doesn't produce. So these are your healthy fats. The fats to limit are things like heavy cream and butter and cheese, and again, processed meats, because these increase your risk of cardiovascular disease and they raise your LDL cholesterol. Finally, the fats to lose are really the tropical fats and the trans fats. These increase your risk of heart disease the most and they raise your bad cholesterol.

Dr. Kerrilynn Hennessey:

What else can we do to make healthy changes? Physical activity is really important, not just for cardiovascular health, but for overall well being. Pre-pandemic, almost half the United States didn't move at all, so small changes. Right now, to go from doing nothing to doing anything, you're going to reduce your risk of having a heart attack or a stroke. Just getting up off the couch, taking a lap, walking up the stairs in your house, if you've got some exercise equipment. It doesn't have to be a lot. The goal per week, the healthiest amount of exercise is 150 minutes, so that's 30 minutes five days a week. Or you could do more intense exercise for less long. But physical activity, we all need to start doing more.

Dr. Kerrilynn Hennessey:

And then I'd ask your doctor about your blood pressure and your cholesterol numbers, because these are really important numbers. These are risk factors that are easily controlled with medications and lifestyle changes. And so if people have gained weight or changed your diet substantially in the pandemic, these numbers may be different now than they were if you were last seen before the pandemic started.

Dr. Kerrilynn Hennessey:

I know we're getting into the question time. I'm almost done, on the last few slides. Dr. Myerson talked last year about knowing your numbers, and I won't belabor the blood pressure numbers, but normal is really less than 120/80. If you're on medications, we shoot for less than 130/80. And if you're higher than 140, you should call someone if no one knows that you have high blood pressure so that we can start getting it down. There are great cuffs that are available over the counter. It's a one-time purchase so that you can check this number at home. The American Heart Association has instructions on their website for how to use and then how to record your blood pressure.

Dr. Kerrilynn Hennessey:

Cholesterol ... I'll give you the main tip is that the LDL is lousy. The LDL, we want lower. And the HDL is healthy and we want that to be higher. If you know those things, you get your numbers checked, you can talk with your doctor about where you are and how to get the LDL down and the HDL up. Lifestyle wise, the only way to get the HDL up is more physical activity and in the kitchen, avoiding those extra fats, particularly the trans fats.

Dr. Kerrilynn Hennessey:

This is my last slide, I think, before we open up for questions. I didn't talk a lot about the sort of psychological component of the pandemic and how this might increase people's cardiovascular risk, but isolation, anxiety, depression, just loneliness, before the pandemic we knew that these were risk factors

for cardiovascular disease cardiovascular events, and these are now particularly prevalent. So this is an example of how I de-stress. This is myself and my husband, Rory, in Acadia. This is us hiking the Whites, kayaking Goose Pond. These are our dogs, Sundance and Beau. Fighting stress is part of this, and so beyond moving more, eating better, knowing what your blood pressure, your sugar, and your BMI is right now, fighting stress is an important way to reduce the burden of cardiovascular disease from this pandemic.

Dr. Kerrilynn Hennessey:

With that, I will end and open it up for questions. Thank you so much for joining me tonight.

Angelica Ladd:

Thank you so much, Dr. Hennessey. Yes, we are open for questions. Excuse me. If you'd like to use that Q&A box to submit your questions. I'm going to actually refer to some questions that were submitted ahead of time, so we can take a look at those. Somebody did ask just now, what are your thoughts, I believe, on the COVID risk with fresh produce. I think we've talked about this a little bit, about just the risk of getting COVID from touching things. Is that something you can talk about?

Dr. Kerrilynn Hennessey:

Yeah. I mean, I guess from my personal experience, I've eaten fresh produce throughout the pandemic and while I wash things, I'm not obsessively washing them. So I don't think about that necessarily as a risk that should outweigh the benefit of eating fresh produce. Certainly up here, a lot of people have gardens or raised beds or window boxes, so if you feel more comfortable growing your own, or if you feel more comfortable, for example, eating frozen vegetables that are often frozen and still have the nutrients, but they don't have the salt that canned vegetables do, those are options. I've never seen someone come in with COVID after such minimal interaction, so that is not a particular concern for me. But there are ways around that to make sure that you can get enough vegetables.

Angelica Ladd:

Thank you. Then we have a question. How long does it take to lower a high LDL number?

Dr. Kerrilynn Hennessey:

Usually, we can check it ... It depends on what our strategy is to lower it. And so if our strategy is lifestyle, we're going to give it more time than if our strategy is medications. If we're using medications to lower it, like for someone who has diabetes who's between 45 and 75, those people usually use medications. Or People with LDL that's over 190 at the start of it, it's so high that really, you should be using medications. That takes about six weeks and we'll see the lab work back.

Dr. Kerrilynn Hennessey:

For lifestyle changes, it might take longer because they're additive. So moving more, you start to get things coming down. But if you shed a little bit of weight because you're moving more or because you've changed your diet and moved away from some of those higher fat, higher calorie foods, all of that sort of adds together over months rather than weeks. And so typically, if that's the only risk factor we're dealing with and the rest of you is healthy and we'd like to avoid a medication, I'll give people three or six months, depending on how much weight we'd like to lose, what our ideal health state is, and what the comfort level is with their initial cholesterol reading.

Angelica Ladd:

Thank you. I have a question that might actually ... we might talk about it a little bit more in our nutrition Healthy Living Series coming up, but somebody wants to know about the difference between the sugars that you see in fruits and vegetables versus the sugars that you see in processed foods and how that ... Because you're saying we should eat more fruits and vegetables, obviously, but they do have sugar in them, so how do we make that decision?

Dr. Kerrilynn Hennessey:

Yeah. Even people with diabetes, so even patients who have difficulty processing sugar, we recommend that they eat fruits and vegetables. The reason is, those natural sugars, while someone who has trouble processing it, they're still going to have to process it, it's not as much. Eating an orange is less sugar than drinking a cup of orange juice, because they take the juice from the natural orange and then there's added sugar on top of that. It's similar with things that come in a box or a bag. Any processed food often has additives, so whatever is the baseline level of sugar that that item had in it, often it's increased just because it got packaged and preserved in some way. So I would say always eating whole foods, things that come from the earth, those are going to be your healthiest options even if they have natural sugars.

Angelica Ladd:

And we will be talking more about, I think, sugars and such on March 9th. We have someone who wanted to talk a little bit about COVID side effects. What do we know about COVID side effects at this point? I mean, some people still have loss of taste and smell, and somebody's saying that they have swelling in their hands and legs. Is that a COVID side effect that you've been seeing with some of your patients?

Dr. Kerrilynn Hennessey:

There's the acute phase of COVID, the time when you've got the infection and you're sick in the immediate setting, and then we're seeing the long COVID. It's people who might have gotten better but not back to normal, and there's a variety of different symptoms that are sort of emerging. Honestly, the best way to know what someone else has experienced is through ... There's a lot of support groups and including the COVID Recovery Clinic here, they see a high volume of patients that are struggling with this because it's so new that it's not well defined what is or is not a result of that COVID infection, what is directly because of the virus or because of the stress of having had it and the ongoing pandemic, and maybe uncovering and underlying illness.

Dr. Kerrilynn Hennessey:

It's very complicated to know. But there are symptoms ... I've seen palpitations, chest pain, shortness of breath, decreased energy. Swelling I haven't seen, so I would definitely tell your doctor about that to make sure that there's not something different going on. People have had gastrointestinal complaints, nausea and diarrhea and different GI habits. It's really run the gamut. Brain fog. So really, people have reported feeling sick from head to toe, even once their COVID is "gone" or fixed.

Angelica Ladd:

Thanks. This is actually an interesting question and I'm curious about it, too. Are heart attacks always a surprise, or can you tell that you might be at risk of a heart attack before it happens?

Dr. Kerrilynn Hennessey:

That's a great question. No, they are not always a complete surprise. I think they're an acute event, and so they can come suddenly, even if you've got warning signs. The warning signs to look for ... In particular if you've had a heart attack before, you know what that felt like, and for every person, it's a little bit different. And so having the experience, trust your gut. If you feel something that feels similar, you should let your doctors know about that. For people who haven't had a heart attack, don't know what that might feel like, often it includes chest pain, but not always. Chest pain is usually right here in the middle of the chest, because that's where the heart is. It can sometimes move from there towards their shoulders or go down your arm.

Dr. Kerrilynn Hennessey:

And traditionally, the symptoms would be provoked when you exert yourself, meaning you may notice you have a little chest discomfort when you're walking up a couple flight of stairs, but you don't get it when you're making yourself breakfast. So it's new symptoms like that are kind of warning signs that something might be wrong. That can be enough to get yourself ahead of it, and we do sometimes see people who come in and they've had symptoms on and off, first at a high level of activity like when they hiked, and now it's when they're walking into their work, and now it's getting their mail. So when you're noticing that you had a symptom and it's getting worse over time, that is definitely something that we would want to know about. So they're not always out of the blue., but sometimes it's hard to recognize the warning signs, especially if you've never felt it before. So shortness of breath and chest pain are the two most common symptoms. I think if you have new shortness of breath or chest pain, at minimum your primary care provider should know about it.

Angelica Ladd:

Thank you. I just wanted to circle back. We have a few questions about myocarditis and the COVID vaccine versus myocarditis after COVID. Can you hear that? So the question is, is the research good enough to say that it's important to get the vaccine even though there is some risk of myocarditis?

Dr. Kerrilynn Hennessey:

Yeah, I think that it is. I think that the risk is so statistically low compared to the amount of people that are protected from hospitalization and ICU stays and death that while vaccination, you can still get COVID, your likelihood of getting very sick from it is very low. And myocarditis from COVID itself is more likely than from the vaccine. So if you avoid the vaccine out of a concern for myocarditis and then you get COVID, COVID actually has a higher risk of myocarditis. So I would say in young men ... And I'm not a pediatrician, but if that's the concern, there's a 16 or 17-year-old male boy and that's the person considering the vaccine, they may not be someone that it's quite as straightforward, depending on what their health history is, if they've had myocarditis in the past, for example. But that's an individual and a very rare circumstance.

Dr. Kerrilynn Hennessey:

'So I would say in general, we're not seeing a lot of it. It's impressive when it happens, and because it came out after the vaccines had rolled out through higher age groups, that's probably why there was a delay in recognizing it. Because it's more common in younger people and the first people to get vaccinated were all people we needed to protect because we were seeing higher death rates. So I'm vaccinated and boosted. I think it's important.

Angelica Ladd:

Yeah. Thank you. We have time for maybe one more question and I'm just kind of looking through. I know we have a lot of really great questions here, and maybe I could get these questions to you, and if you have time, you could answer some of them and we can put them on our webpage if that works.

Dr. Kerrilynn Hennessey:

Yeah, absolutely.

Angelica Ladd:

One of the questions that I keep seeing is in regards to coconut oil and how that supports increasing HDL and how it works overall. Is that something that is recommended?

Dr. Kerrilynn Hennessey:

That's something that's probably beyond my expertise, to know how exactly coconut oil works. It is in ... If I go back to that slide with it, if I can. It might take too long to go back. It's in the category of fats with the higher risk of cardiovascular disease, and so in the preventative guidelines for cardiovascular disease, we do recommend that people use more olive oil and unsaturated. So these oils here just have a different composition to trans fats, hydrogenated, and tropical oil. I don't know from a biochemical standpoint why they're so different internally, and that might be a good one ... Jean Copeland, our cardiac nutritionist, I think she does some of these at times and that would be a great topic for her to discuss, is fats and how to get good fat in your diet and limit bad fat. But I do know that these are the ones that should be avoided if we can.

Angelica Ladd:

Nice. Yeah. And then I guess just to wrap it up, maybe we can talk a little bit about what you would recommend for people who are feeling like they are dealing with lasting COVID symptoms or having those long haul symptoms and what they should do, what their steps should be.

Dr. Kerrilynn Hennessey:

Yeah. I think first thing is if you've had COVID and you think that you still have symptoms or have failed to fully recover to your normal function is to get to see your doctor, just primary care doctor, just to make sure that it's not something new that's going on, not something else that's being missed. We don't want to say, "This is definitely because I had COVID," when maybe there's some new process that needs to be diagnosed. So I would go to the doctor to talk through what you feel, how long you felt it for, what the relationship was with your infection. And then there is the COVID Recovery Clinic here, which I have a couple of patients who attended and have found great benefit in that.

Dr. Kerrilynn Hennessey:

While this is so new, we don't have specific therapies for long COVID, there's no one magic pill that makes everyone feel better, I think just the idea that you're not alone and that we're learning as we gain experience with seeing these patients and hearing from other people what their timeline was like for recovery. Because people do eventually ... It's not forever COVID. It's long haul, but it's not forever, and people recover and it's a message that people need to hear sometimes when you're feeling sick and it's been a long time.

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Angelica Ladd:

Well, thank you so much for being with us tonight, Dr. Hennessy. We appreciate your knowledge and your time. I just wanted to remind everyone who's tuning in that we do have two upcoming Healthy Living Series events. I did put the link for the Healthy Living Series webpage in the chat if you want to click on that. You can register for our nutrition event, which is happening on March 9th, and our colorectal cancer screening event, which screenings are so important right now. We're really stressing how important screenings are for everyone to maintain their health and their medical homes. Yeah, so that is on March 22nd, the Colorectal Cancer Screening 101. With that, I just want to say thanks again, Dr. Hennessy, and-

Dr. Kerrilynn Hennessey:

Thanks so much for having me. Thank you everyone who joined. I really appreciate it. I'll take a look through your questions and I'll send some answers over to Angelica.

Angelica Ladd:

Well, thank you. Have a great night everyone.

Dr. Kerrilynn Hennessey:

Bye.