

6/17/21

The New Integrative Health Paradigm

Presented by Daniel Monti, MD, MBA

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00:00:03.600 --> 00:00:12.990

Villanova Webinar 1: Good afternoon, welcome to the June cope webinar for health professionals, we are again so grateful that you're with us for today's continuing education opportunity.

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Villanova Webinar 1: Today's COPE webinar will explore integrative health,

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00:00:17.340 --> 00:00:30.540

Villanova Webinar 1: some evidence base behind it, and specifically identify some key elements of integrative nutrition and health mind body interactions and applications, we can implement both professionally and personally.

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00:00:31.500 --> 00:00:37.470

Villanova Webinar 1: We have about 125-130 health professionals registered for today's webinar.

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00:00:38.070 --> 00:00:51.030

Villanova Webinar 1: Manager for the MacDonald Center for Obesity Prevention and Education at Villanova University Fitzpatrick College of Nursing. I have the pleasure of being the moderator for today's webinar.

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00:00:52.200 --> 00:00:57.030

Villanova Webinar 1: We are excited to dive into this topic today and welcome an expert and pioneer in the field.

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Villanova Webinar 1: But before we move on to introducing our speaker I'm just going to take a minute to review some information about COPE and Villanova Fitzpatrick College of Nursing.

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Villanova Webinar 1: Villanova university M. Louise Fitzpatrick College of Nursing is home to the first college of nursing in the country to have a Center devoted exclusively to obesity, prevention and education.

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Villanova Webinar 1: COPE's goals are to enhance nursing education in topics related to nutrition, obesity, prevention and health promotion strategies,

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Villanova Webinar 1: To provide continuing education programs, such as this webinar on obesity and obesity related diseases for health professionals and educators and, finally, to participate in research to expand and improve evidence based approaches for obesity, prevention and education in the community.

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00:01:45.270 --> 00:01:53.040

Villanova Webinar 1: Before we begin the presentation, I would just like to remind you that pdfs of today's PowerPoint slides will be posted on the COPE website

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00:01:53.640 --> 00:02:04.650

Villanova Webinar 1: later today. After going to COPE's website, simply click on the webinar description page and you will find this month's webinars and pdfs of the slide set.

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00:02:05.310 --> 00:02:12.780

Villanova Webinar 1: Please use the question and answer box on your screen to submit any questions for our speaker all questions will be answered at the

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Villanova Webinar 1: at the end of the program as time permits. The expected length of the webinar is one hour. The session, along with the transcript, will be recorded and placed on the COPE website within the next week.

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00:02:26.850 --> 00:02:42.060

Villanova Webinar 1: If you used your phone to call into the webinar today, and want credit for attending please just take a moment afterwards to email us at [cope@villanova.edu](mailto:cope@villanova.edu) and provide your name, so that we can send you your CE certificate.

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Villanova Webinar 1: The objectives for today's webinar entitled the new integrative health paradigm are to describe key elements of integrative nutrition and health and to explain scientific mechanisms of mind body interaction.

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00:03:01.230 --> 00:03:12.810

Villanova Webinar 1: Villanova University M Louise Fitzpatrick College of Nursing is accredited as a provider of nursing continuing professional development by the American Nurses Credentialing Center Commission on Accreditation.

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00:03:13.530 --> 00:03:24.930

Villanova Webinar 1: Villanova University College of Nursing Continuing Education (COPE) is also a continuing professional education CPE Accredited Provider, with the Commission on Dietetic Registration.

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Villanova Webinar 1: Our webinar this month awards one contact hour for nurses and one CPEU for dietitians and DTRs. The suggested CDR performance indicators are listed on the screen.

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00:03:39.510 --> 00:03:44.190

Villanova Webinar 1: You must attend the entire webinar presentation to receive the continuing education credit.

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00:03:46.500 --> 00:03:56.100

Villanova Webinar 1: Our webinar today will be presented by Dr Daniel Monti and I am privileged to welcome him virtually to Villanova University today for our presentation.

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00:03:56.940 --> 00:04:07.860

Villanova Webinar 1: Daniel Monti, MD, MBA is Founding Director and CEO of the Marcus Institute of Integrative Health at Thomas Jefferson University and Jefferson Health

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Villanova Webinar 1: and Founding Chair of the Department of Integrative Medicine and Nutritional Sciences at the Sydney Kimmel Medical College. Dr Monti earned his MD from the State University of New York at Buffalo

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00:04:20.370 --> 00:04:29.760

Villanova Webinar 1: And an MBA from Temple University Fox School of Business. He is an author of many peer reviewed publications on integrative health and two popular press books.

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Villanova Webinar 1: He also developed a series of novel educational programs for physicians, medical students and advanced practice health professionals in integrative health sciences.

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00:04:41.430 --> 00:04:49.320

Villanova Webinar 1: While we are preparing for the presentation to begin, I just wanted to mention that neither the planners nor presenter of this webinar have any disclosures to report.

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00:04:49.980 --> 00:04:59.460

Villanova Webinar 1: Accredited status does not imply endorsement by Villanova University, COPE or the American Nurses Credentialing Center of any commercial products or medical nutrition advice

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Villanova Webinar 1: displayed in conjunction with an activit. With that, Dr Monti I am so happy to welcome you to our program and I'm going to hand over control to you-- so welcome!!

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Daniel Monti MD: Thank you so much, and much appreciation to you Lisa and to all of your colleagues at Villanova University for creating such a terrific webinar series and for allowing me the honor of presenting today.

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Daniel Monti MD: And let's see.

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Daniel Monti MD: There we go.

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Daniel Monti MD: Nothing to disclose so I have this little visual of who we are, because it often gets confusing to people. We've really created at Jefferson a specialty of integrative medicine,

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Daniel Monti MD: And this is the formation of the first ever department of integrative medicine and nutritional science at a traditional Medical School,

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Daniel Monti MD: In the country, maybe the world the way that we're doing it, this is a recent event and for us it's important to set the standard of

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Daniel Monti MD: what is integrative care, what is the science tell us where do we need more science what clinical trials should we be running, what academic programs makes sense for our medical students and for other health professionals. And so we really have

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Daniel Monti MD: all of those those three legs of a three legged stool- that those pillars being academic, research, and clinical. We we have two clinical

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Daniel Monti MD: centers in Villanova just down the street from Villanova university so it's great to be interacting and collaborating with our neighbors. We should do more of it.

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Daniel Monti MD: And since we're we're right there sometimes when I take the train I get off right there at the Villanova train station in the heart of the university and walk over to our

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Daniel Monti MD: clinic on Lancaster avenue, where we also have an outpatient imaging Center with a very cool integrated PET MRI machine. It's a three tesla MRI, but it also does PET imaging. This allows us to really do innovative clinical trials,

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Daniel Monti MD: but also to do clinical scans when needed to so we we have that dual function at the Villanova Center, which is our larger clinical entity,

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Daniel Monti MD: And then, of course, our Center city offices on the main general Jefferson campus, which is also where the home of our academic department is we have

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Daniel Monti MD: mindfulness programs, which are really a flagship program for the Marcus institute from its inception, and those are named after one of our.

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Daniel Monti MD: early

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Daniel Monti MD: important contributors and collaborators Myrna Brind so there's our Myrna Brind mindfulness programs. We are going to learn to bring mindfulness to the Center.

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Daniel Monti MD: So why integrative medicine?

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Okay.

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Daniel Monti MD: So why integrative medicine and what what is the value what, why do we take the time to create this paradigm of health- this extension of medicine that over time we hope is

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Daniel Monti MD: really just medicine and what is the value add and what is the paradigm of integrative medicine that makes a difference? We're really looking at the whole person and integrative medicine- mind, body spirit- all the contributors of health.

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Daniel Monti MD: We're not trying to replace conventional medicine and integrative medicine and we're not alternative medicine, so when we talk about

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Daniel Monti MD: integrative medicine we're very clear to make those distinctions because it's important for us that

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Daniel Monti MD: we're not trying to replace what's good. There's really great things about the conventional model that I know many of you are working in. And medicine, when I say medicine, I include nursing as part of medicine. At

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Daniel Monti MD: least the way that I look at it so medicine nursing and all of the other health professionals, that are under that umbrella of of conventional medical care healthcare.

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Daniel Monti MD: Everybody does a great job at acute care medicine, and I think that that's where the current model shines-the problem is once we get past those fires. So my good friends and colleagues in primary care,

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Daniel Monti MD: and those of you who work in a primary care setting know that basically there's too many appointments that an hour.

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Daniel Monti MD: And the clinicians whether it's the nurse practitioner the nurse, the physician they're running from room to room putting out the fires of the day.

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Daniel Monti MD: And there's plenty of them-- is it a roaring strep throat, is it a glucose level through the roof is it somebody who's having chest pain and needs to get over to the emergency room is it somebody who

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Daniel Monti MD: most likely has broken a bone and needs acute care from one of our orthopedic specialists? All of those things you know require top level

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Daniel Monti MD: specialty care top level medical care and we have it in the United States. We shine in those things, arguably, we have the best medicine in the world.

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Daniel Monti MD: People come from all over to learn our medical technologies, our surgical techniques and even to participate in our pharmaceutical trials and yet

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Daniel Monti MD: there's an issue with our health status as a nation and so i'm going to show you a series of these slides that show that, despite having the best medical care, so to speak.

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Daniel Monti MD: We have a problem with our overall health status, because our medical model is a disease- focused model to put out those acute care fires. And where we tend to have issues, where we tend to do more poorly than a lot of

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Daniel Monti MD: comparable countries throughout the world is in overall wellness and in our chronic health

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Daniel Monti MD: and our healthy life expectancy.

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Daniel Monti MD: And as we start to kind of put that picture together, it is glaring that despite medicine medicine being so good there's something about health, and this is even when you take into account.

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Daniel Monti MD: confounders, such as access to care when you tease some of those things out when you do the statistical analyses we still just don't do as well

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Daniel Monti MD: as many other countries, and when, we talk about healthy life expectancy, that's how long and how how well do we live into later life without significant morbidity, we never make the top 10 list for for males or females.

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Daniel Monti MD: And this isn't because we don't spend a lot on money on health care, rather we spend a significant amount on health care, and you know these numbers just continue to grow, as many of you know.

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Daniel Monti MD: And so what, what are we missing or what can we be thinking about in a more whole person holistic kind of way that can

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Daniel Monti MD: help us with our overall health status and wellness? And that's really what the integrative model of care is that we've

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Daniel Monti MD: been building a Jefferson which is really taking wellness oriented strategies and adding them to the conventional model of care, so that we can add value in terms of health healing getting over illnesses because

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Daniel Monti MD: many of the strategies that we will be talking about help with not only long term wellness status, but also with how we recover from illnesses that we have.

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Daniel Monti MD: As we think about getting into adulthood, some of the things that were the big concern in childhood for health and wellness are now replaced by environmental issues, so

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Daniel Monti MD: early on there's infectious diseases, there's genetic inborn errors of metabolism, things like that, but once we make it to adulthood,

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Daniel Monti MD: now we have to think about all of the contributors to the major sources of illness that we have in the United States, such as cardiovascular disease, diabetes,

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Daniel Monti MD: obesity and and so forth. Now what I'd like to do is talk about two areas that integrative medicine, I think shines and that's

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Daniel Monti MD: bringing mind and body back into the equation, and also talking about the effects of nutrients both micro and macro and also the

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Daniel Monti MD: the mind-body approach to diet and how we eat and how we think about food and those kinds of things and so

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Daniel Monti MD: I'll be talking about them a bit just briefly, but then we'll try to put it together in a holistic

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Daniel Monti MD: picture and I want to focus a little bit on mind-body, because it's often lost when we're talking to our colleagues. We're focusing a lot on disease, but then

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Daniel Monti MD: We miss it a major contributor to how well we navigate disease and how well health outcomes are How good health outcomes are

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Daniel Monti MD: for numerous diseases has a lot to do with the mind- body aspect of health and well being and what's interesting is this is something that was you know, not in the conversation, for a long time, because there was a prevailing kind of mind-body dualism.

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Daniel Monti MD: For the dawn of modern medicine, this was one of the things that was very much in play and there's the famous Descartes way of thinking about the world that

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Daniel Monti MD: you know these great differences between body and mind and a lot of this had political background to it. Descartes was given access to

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Daniel Monti MD: bodies after death or autopsy and there was,

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Daniel Monti MD: if you read some of the old literature, there were deals struck with the early church that

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Daniel Monti MD: you know, basically, as long as the focus was on the body, the mind is of the soul and that needs to be kept into the spiritual realm and those kinds of things. So this idea that our physical body

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Daniel Monti MD: is disconnected in a way from any things that have to do with mind our thought process our emotions, how we perceive the world, how we interact in the world, the thoughts that we think are our behaviors,

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Daniel Monti MD: our facial expressions-all of these things actually have a tremendous impact on how our physiological processes work, except that kind of thinking was very foreign just a century ago, and even less than a century ago only in the last 40 years has there been

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Daniel Monti MD: any kind of tremendous strides in how we understand mind and body, but the dualism back in the day of Descartes then got reinforced with mechanism, because people like Newton, for example, provided this elegant description of how things worked in the inanimate world. So all of those

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Daniel Monti MD: physics equations you may have learned when you were doing you know pre nursing pre MED pre whatever for the different participants on the call,

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Daniel Monti MD: Most of us had to take some form of physics and so that Newtonian physics was for the mechanistic world and applies very well to the mechanistic world. The problem is that we're not a machine- we're a living system and we don't follow those laws and so

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Daniel Monti MD: restricting the science to a mechanistic model doesn't work really well, yet that is how modern medicine evolved.

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Daniel Monti MD: In reality, we're a network and living systems or networks living system networks are nonlinear.

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Daniel Monti MD: In the case of a living network, there's feedback loops all things that can't be measured in a mechanistic way.

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Daniel Monti MD: And here's the thing: networks have the capacity to be self regulating and self organizing,

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Daniel Monti MD: so in a non living machine, the parts exists for each other, such as the chain on a bicycle.

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Daniel Monti MD: But in a living system, the parts exist by means of each other, such as with organ regeneration and so

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Daniel Monti MD: earlier philosophers noticed this, even if they didn't know much about biology and said, hey it doesn't seem like the mechanistic science quite applies to a living system like a human being.

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Daniel Monti MD: And, cognition is really the process of life so mind is not just a thing, but a process and life and cognition are inseparably connected.

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Daniel Monti MD: And oftentimes we talk about you know evolution and say you know we're really descended from X or y but even the simplest bacterium has mind or cognition. If you think about an amoeba in a petri dish it will go towards the light; it'll go towards particles

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00:19:07.860 --> 00:19:23.970

Daniel Monti MD: of a leftover bacteria and engulf it and take it in. So it has its senses, the environment and reacts to the environment in a way to survive and in essence that's what we do. Our entire system is geared towards survival.

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00:19:25.170 --> 00:19:35.640

Daniel Monti MD: Whether we're talking about how the nervous system works or all of the rest of the systems, they come together in networks upon networks upon networks to optimize survival.

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00:19:36.120 --> 00:19:43.200

Daniel Monti MD: And that's what homeostasis is about and that's what we're all about and so with mind and body, mind is really the process

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00:19:43.650 --> 00:19:52.230

Daniel Monti MD: of our system, and so you can't connect- you can disconnect the two. In fact, there isn't some sort of rope or chain connecting them. When we were talking

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Daniel Monti MD: early on, about mind body connection and what is the connection between mind and body when mind and body are really the flip sides of the same coin. We're going to talk a little bit more about some of the mechanisms that describe that very well, so if we're alive, we have

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Daniel Monti MD: cognition to some degree, and if you

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Daniel Monti MD: just remind yourself of the amoeba example even a one-celled organism has cognition, and so it has mind, even if it doesn't have a brain.

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Daniel Monti MD: And I think that that's another misconception that mind is a function of brain, but actually mind is sort of the the energetic communication system of a living organism.

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Daniel Monti MD: And so, another concept that I would like to

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Daniel Monti MD: integrate, so to speak, is this age old nature versus nurture-- is genes versus the environment. I think we well know now that, of course, it's a combination. Our genes are set up for things. But then the environment isn't just

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Daniel Monti MD: one thing. The environment is everything the cells of the body are exposed to, so whether there is adequate nutrients or inadequate nutrients the status of the microbiome, a topic which we'll talk more about,

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Daniel Monti MD: or their toxins. Stress- why stress? Because stress, as we will see, has a direct impact on what these genes are doing again, underscoring that mind and body are inseparable. So,

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Daniel Monti MD: genetic expression has a lot to do with what's going on in our psycho- social worlds, so how genes express themselves- healthy versions versus unhealthy versions-

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Daniel Monti MD: has a lot to do with this, just like it has to do with this and has to do with this again. We can't

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Daniel Monti MD: just tease one of them out and say Aha that's that's what's going on, and this is why there's the growing field of epigenetics,

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Daniel Monti MD: which really explains how all of the different things that affect how a gene expresses itself.

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00:22:04.680 --> 00:22:12.360

Daniel Monti MD: And for those of you who don't really remember genetics well what we mean by that is everything that's going on in the body is controlled by-

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00:22:12.990 --> 00:22:27.360

Daniel Monti MD: almost everything going on the body is controlled by genes and the protein synthesis that occurs in genes and how that protein synthesis occurs can be influenced by all of these factors. I like to often use the

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00:22:29.610 --> 00:22:39.180

Daniel Monti MD: analogy or metaphor of keys on a keyboard so if we think about the genes themselves as the keys and

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Daniel Monti MD: which are connected to the piano the rest of the organism and the environment, as the player, how we play those keys is really important. Now the keyboard itself is important to some degree so if we were to put

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00:22:57.120 --> 00:23:10.830

Daniel Monti MD: two pianos in our virtual room right now and on one side of it we put a Steinway grand piano beautiful glistening with the best acoustics in the world, and on the other end of the room, we put

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00:23:11.850 --> 00:23:18.510

Daniel Monti MD: that upright piano from your grandmother's house or your aunt's house, we all had one growing up somewhere.

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Daniel Monti MD: Or you visited someone that did so, you know it's a little bit out of tune- it's, you know the sound is so so, but you know it's okay and works well enough.

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00:23:29.370 --> 00:23:42.930

Daniel Monti MD: Now, if we bring if we put me at the Steinway grand piano with my failed couple of years of piano lessons because I didn't want to take them and didn't like my piano teacher and so on

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00:23:43.770 --> 00:23:53.730

Daniel Monti MD: as I rolled my eyes, it was time to practice, and we put we bring Mozart back from the dead and put him at my grandmother's old upright piano,

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Daniel Monti MD: who's going to play the better music, who do you want to listen to, because I can tell you Mozart could make my grandmother's piano sing and I can't do much with that Steinway.

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00:24:05.310 --> 00:24:17.250

Daniel Monti MD: And so it's really a matter of how do we play the, how do we play that keyboard because it's true sometimes people have something unfortunate where a key doesn't work or something is

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00:24:17.520 --> 00:24:32.220

Daniel Monti MD: out of tune here or there, but, overall, the music that you create out of that keyboard has a lot to do with you and really how you conduct the things that are within control in your life as you especially get into adulthood.

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00:24:33.720 --> 00:24:34.680

Daniel Monti MD: And so,

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Daniel Monti MD: As we think about stress then i'll go back to this slide one more time right so as genes in the environment.

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Daniel Monti MD: As we think about genetic expression let's talk a little bit about the psychosocial aspects of genetic expression.

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Daniel Monti MD: And so stress is something that we all can relate to a little bit right now and it's been a stressful year for many people, for most people.

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Daniel Monti MD: And the stress pathways are significant when chronic because what is stress? Stress is first of all it's hardwired that we feel stress when

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00:25:12.390 --> 00:25:17.790

Daniel Monti MD: the right things are activated in the brain and nervous system- that's for survivalist's reason.

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00:25:18.570 --> 00:25:25.800

Daniel Monti MD: And if we think about the autonomic nervous system for a moment, because what we're talking about here is the sympathetic nervous system pathways,

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00:25:26.100 --> 00:25:35.730

Daniel Monti MD: where you might recall, we have the autonomic nervous system, we have the sympathetic nervous system and the parasympathetic nervous system. If we think about the sympathetic nervous system is fight or flight,

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00:25:36.810 --> 00:25:57.060

Daniel Monti MD: then we want to have that fight or flight activation occur almost reflexively without us thinking about it, not almost reflexively actually reflexively so, for example, if we go back in time and we think about some of our early roots, we see a lion in the jungle.

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00:25:58.290 --> 00:26:07.110

Daniel Monti MD: We want the nervous system to go into fight or flight without having to think about hmm is that something dangerous should I

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00:26:07.470 --> 00:26:15.030

Daniel Monti MD: get to a place of safety fight or flee get a weapon run up a tree, probably the latter if you're smart,

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00:26:15.810 --> 00:26:26.370

Daniel Monti MD: You want that to be an autonomic- automatic and we call it a lot of knowledge for the autonomic nervous system, but an automatic reflexive thing that occurs, and it does.

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00:26:26.730 --> 00:26:40.770

Daniel Monti MD: And so we get activated into that fight or flight or sympathetic nervous system activation pathway activation and we do what we need to do say climb up the tree. We become mobilized, we become hyper vigilant,

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00:26:41.400 --> 00:26:48.270

Daniel Monti MD: the blood pools, to the limbs, digestion gets shut down relatively and we get ourselves to safety.

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00:26:48.600 --> 00:26:55.620

Daniel Monti MD: Now, the idea is that when we perceived threats in the environment to our well being we have sympathetic activation,

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00:26:56.010 --> 00:27:05.130

Daniel Monti MD: And then, once the threat passes, we then can go to a more restorative parasympathetic mode of restoration and recuperation.

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00:27:05.910 --> 00:27:22.800

Daniel Monti MD: Now, the problem with present society is that the lions of yesterday have been replaced today by a pandemic- kids that have to be home-schooled, concern about elderly family members who might have been vulnerable during the pandemic,

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00:27:25.020 --> 00:27:35.310

Daniel Monti MD: financial issues what's happening to my job what's happening to the direction that my company is going, all of these things that become daily

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00:27:35.730 --> 00:27:51.090

Daniel Monti MD: perceived threats to well being Remember, sympathetic nervous system activation doesn't need to be sort of a life- threatening thing like a lion is about to pounce on you, because over time there's this cumulative effect of

148

00:27:51.780 --> 00:28:01.410

Daniel Monti MD: Micro Lions, so to speak, in the environment, so that we're constantly in that fight or flight mode, because just the perception of

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00:28:02.040 --> 00:28:08.970

Daniel Monti MD: something that's going to threaten your well being in some way or another- whether or not you're consciously thinking about it-

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00:28:09.390 --> 00:28:20.250

Daniel Monti MD: puts you into that sympathetic nervous system, fight or flight mode and let's think about again what happens just in the short run now there's the long term sequelae that you can see down here,

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00:28:20.640 --> 00:28:29.820

Daniel Monti MD: to chronic sympathetic nervous system activation but what happens in the shorter term makes a lot of sense when you think about it, so when you're stressed,

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00:28:30.330 --> 00:28:36.420

Daniel Monti MD: so to speak, which means you're constantly in this fight or flight sympathetic nervous system mode,

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00:28:36.810 --> 00:28:43.710

Daniel Monti MD: you're hyper vigilant, which means it's hard. You have a hard time sleeping, you have a hard time relaxing, you have muscle aches and pains, because the

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00:28:44.370 --> 00:28:55.230

Daniel Monti MD: blood and energy of the system goes to the musculoskeletal system, it goes away from the digestive system, so most people complain of GI upset difficulty

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00:28:55.950 --> 00:29:03.570

Daniel Monti MD: digesting food and so on, this is the typical distressed person, and if that sounds familiar, which would be

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00:29:03.960 --> 00:29:12.600

Daniel Monti MD: probably pretty common given everything we've been going through then that's the bad news, but the good news is there are a lot of things you can do about that.

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00:29:13.110 --> 00:29:22.170

Daniel Monti MD: And it might sound familiar for some of the people that you're connected to and care about and I think that this is a time where we have to recognize the stress is high,

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00:29:22.710 --> 00:29:35.280

Daniel Monti MD: and we need to take a step back and think about what are the self care things we can do to break that fight or flight mechanism that's constantly going off- those alarm signals constantly going off, so that we can

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00:29:36.060 --> 00:29:43.110

Daniel Monti MD: get a new perception of what's going on in the world and also put those stressors in their appropriate places.

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00:29:46.470 --> 00:29:59.940

Daniel Monti MD: And so we know that just in a short term stressful task, we can increase all of these different things that basically amount to increased inflammation and

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00:30:01.320 --> 00:30:10.620

Daniel Monti MD: Over time, a poor immune response and, if you look at traumatic stress down there that becomes an even bigger issue and affects

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00:30:11.880 --> 00:30:22.800

Daniel Monti MD: the immune cells, the T cells over a longer period of time. Traumatic stress again that's usually related to an event that's big and it's life threatening and

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00:30:23.280 --> 00:30:32.760

Daniel Monti MD: the effects of traumatic stress often don't go away, after years because whenever there's a trigger reminder in the environment of a traumatic stressful event,

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00:30:33.720 --> 00:30:43.920

Daniel Monti MD: there's all kinds of issues involved, and so, if we look, you know if this list of all of the things you know these the cytokines and chemokines, these are pro inflammatory.

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00:30:45.270 --> 00:30:54.120

Daniel Monti MD: Interleukin 10 is anti inflammatory- it goes down. Nuclear factors such as NF Kappa B, which is where we transcribe in genes for,

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00:30:54.600 --> 00:31:06.090

Daniel Monti MD: these pro inflammatory cytokines and then the functional activities of leukocytes such as NK cell activity and receptor changes that occur on those cells again as a result of stress.

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00:31:07.380 --> 00:31:19.290

Daniel Monti MD: Now Lena horne had it right because it's not the stressors it's how we perceive them and what we do with that perception of them. So oftentimes,

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00:31:19.920 --> 00:31:30.540

Daniel Monti MD: The stressors just mount and mount and there's a narrative going on inside of us that our life is and our well being is more threatened than it may actually be.

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00:31:31.110 --> 00:31:42.270

Daniel Monti MD: And that is something that naturally occurs with chronic stressors and so if we have tools that help us to break that pattern and basically step outside ourselves,

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00:31:42.540 --> 00:31:48.060

Daniel Monti MD: and be the observers of the stressors- mindfulness being a good one, which i'll talk about in a moment-

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00:31:48.420 --> 00:32:02.430

Daniel Monti MD: then we're able to navigate the stressors better, and this has direct impact on immune cells and also in the way that the brain talks to itself, which some of our clinical trials have shown and I'll show you a little bit more of that.

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00:32:02.970 --> 00:32:10.350

Daniel Monti MD: We know that, for example, just mind- body practices can have a direct impact on all of the factors that we're talking about.

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00:32:11.640 --> 00:32:21.720

Daniel Monti MD: Mindfulness is one that we spend a lot of time researching. We've published dozens of studies on mindfulness and it's basically a set of tools.

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00:32:22.710 --> 00:32:32.910

Daniel Monti MD: Many of them are meditation- based, where we learned to pay attention in the moment non-judgmentally and this again allows us that space between ourselves and our stressors.

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00:32:33.570 --> 00:32:47.040

Daniel Monti MD: And when we do that, we can see a big difference in how the brain processes, then stressful cues or even at rest, so in this particular study, where we looked at

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00:32:48.060 --> 00:32:53.220

Daniel Monti MD: distressed breast cancer survivors after they

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00:32:54.600 --> 00:32:56.070

Daniel Monti MD: learned how to

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00:32:58.140 --> 00:32:59.970

Daniel Monti MD: After they learned how to

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00:33:01.560 --> 00:33:08.670

Daniel Monti MD: navigate stress and stressful queues, even at rest, distress centers in the brain changed over time.

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00:33:09.120 --> 00:33:19.770

Daniel Monti MD: And then, when we gave them a stressful queue, if you look at like the cingulate cortex here which processes stressful events there's actually a decreased activation- that's why it's in blue.

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00:33:20.190 --> 00:33:34.200

Daniel Monti MD: And so, in the previous slide we have increased activation of areas that navigate stressors and then, in response to a stressor, or we have decreased stress activation in key areas of the brain.

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00:33:34.710 --> 00:33:44.460

Daniel Monti MD: And we have seen this over and over again in different time types of studies. We actually published a few studies on something called the neuro emotional technique

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00:33:44.880 --> 00:33:52.260

Daniel Monti MD: for cancer survivors who had traumatic stressful events and again how the brain talks to itself and

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00:33:52.710 --> 00:34:01.680

Daniel Monti MD: the long term sequelae of the traumatic stressor changed significantly in these patients, and that was published in the Journal of Cancer Survivorship which is

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00:34:02.100 --> 00:34:17.520

Daniel Monti MD: the best cancer survivorship journal, that there is, and some of the communication pathways that we learned about from that study really changed the direction of clinical trials for this population of people.

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00:34:19.110 --> 00:34:21.690

Daniel Monti MD: As we kind of think about again,

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00:34:23.190 --> 00:34:36.900

Daniel Monti MD: genes versus environment, I'm actually reminding you that the phenotype which is you and it's not just "you in the mirror" phenotype such as how you look on the surface, but it's how you feel, how you function,

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00:34:37.530 --> 00:34:50.130

Daniel Monti MD: what your stress levels are whether you're thriving how, what is the status of you today, and all of these things affect your genetic expression to create this phenotype of you.

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00:34:50.610 --> 00:34:56.760

Daniel Monti MD: Now this phenotype can change over time, it can change for the worse, but it can also change for the better.

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00:34:57.210 --> 00:35:08.310

Daniel Monti MD: And if we can engage in some of the health promoting behaviors that we're talking about today, we can have a significant impact on our phenotype or how our genes express themselves.

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00:35:09.150 --> 00:35:19.170

Daniel Monti MD: Now I know that nutrition is something that many of you think about and that's the focus of this particular webinar series and so let's just talk a little bit

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00:35:19.680 --> 00:35:27.360

Daniel Monti MD: about nutrition and how it fits this model that we're talking about in a larger sense, so we know that, for example,

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00:35:28.080 --> 00:35:43.980

Daniel Monti MD: there are all of these different independent factors and variables that can have a big impact on health and well being and health of genes express themselves so it's the foods that we eat actually our independent

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00:35:45.060 --> 00:36:06.720

Daniel Monti MD: risk factors, as well as increased or even significantly decreased body weight and so obesity and malnourished states can have a negative health consequences that can turn obesity can turn on tumor markers inflammatory markers, decrease things that we really need to

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00:36:08.550 --> 00:36:18.630

Daniel Monti MD: navigate our biochemistry such as adipokinectin increase things like interleukin 1 and all of the other pro inflammatory cytokines that you saw from the previous slides, slides.

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00:36:19.680 --> 00:36:29.490

Daniel Monti MD: Insufficient nutrients can actually cause genetic expression problems, cause oncogene activation and so forth.

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00:36:30.600 --> 00:36:41.310

Daniel Monti MD: If we get enough ones, the rich vital nutrients in our in our diet, they could have a highly protective effect to some of the processes that we're talking about.

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00:36:41.760 --> 00:36:52.320

Daniel Monti MD: We can't get those vital nutrients from highly processed foods, we can't get those vital nutrients from non plant based foods so you're going to see a take home that I underscore in the next few minutes that

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00:36:53.010 --> 00:37:00.000

Daniel Monti MD: Plant based as many plants, as we can get the better I'm not saying you have to be a strict vegan every day of your life, but I think

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00:37:00.930 --> 00:37:11.640

Daniel Monti MD: If the focus could be how can I get more plants in, then that will cause less of the other stuff because you're taking in more of the plants and over time,

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00:37:12.090 --> 00:37:19.890

Daniel Monti MD: Is to get to a more plant based diet - a diet that's happier to your biochemistry and your whole mind body architecture.

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00:37:20.250 --> 00:37:32.730

Daniel Monti MD: We know that processed foods such as cured meats junk food sugary snacks are all associated with increased risk of cardiovascular disease and actually several cancers, particularly when we're talking about cured meats.

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00:37:33.120 --> 00:37:41.400

Daniel Monti MD: And then there's fats- they're not all created equally oftentimes people think, to avoid fats altogether when that's not actually the best approach.

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00:37:41.670 --> 00:37:53.130

Daniel Monti MD: The best approach is to go out of your way to get healthy fat that's right go out of your way to get healthy fats, so the healthy fats we all heard of Omega 3 fatty acids and so that comes from

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00:37:54.240 --> 00:38:01.620

Daniel Monti MD: fresh fish, which you know you have to have in moderation, given all the pollution in the ocean, so no more than probably three servings a week less if you're pregnant.

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00:38:02.700 --> 00:38:12.570

Daniel Monti MD: But then there's also plant sources of Omega 3 fatty acids and then there's Omega 9 fatty acids so things like olive oil, which has anti inflammatory

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00:38:14.520 --> 00:38:26.940

Daniel Monti MD: components to it beyond the Omega-9 avocado and then nuts and seeds not peanuts, which are really a legume and only have unhealthy oil, but things like almonds walnuts.

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00:38:27.360 --> 00:38:35.130

Daniel Monti MD: And some of the seeds people might like to eat, such as pumpkin seeds sunflower seeds have really good fat.

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00:38:35.550 --> 00:38:49.080

Daniel Monti MD: You know ideally, we would have an Omega- so when we talk about fat we'll wait till I get to that slide fat can be a little bit confusing so we'll spend just a little more time talking about it in one of the upcoming slides.

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00:38:53.340 --> 00:38:59.490

Daniel Monti MD: And you know there's many of these studies--this study had you know over 1000 people there's.

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00:39:01.650 --> 00:39:12.420

Daniel Monti MD: There's so many clinical trials out there, right now, showing that, basically, if we eat too many ultra processed high sugar foods,

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00:39:12.930 --> 00:39:21.990

Daniel Monti MD: it's going to lead to worse health outcomes that's just a fact and so again this isn't to beat yourself up if you notice you're doing too much of it,

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00:39:22.230 --> 00:39:31.290

Daniel Monti MD: it's to sort of remind you to start making some transition ary choices, you know have unsweetened iced tea with your lunch, instead of a soda.

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00:39:32.760 --> 00:39:38.160

Daniel Monti MD: Think about how you can get a salad in in place of a

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00:39:39.300 --> 00:39:53.940

Daniel Monti MD: sandwich of processed luncheon meats. these kinds of things just thinking about taking in more of the good stuff which will help you to take in less of the bad. I think to go with that approach versus an all or nothing approach

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00:39:54.780 --> 00:40:01.620

Daniel Monti MD: The all or nothing approach usually leads to failure and feeling despondent and all of those kinds of things which is it necessary,

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00:40:01.980 --> 00:40:10.620

Daniel Monti MD: because what someone's the latest evidence shows is that by simply increasing from wherever you are,

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00:40:11.070 --> 00:40:21.180

Daniel Monti MD: the good stuff the plant based stuff that we're talking about the healthy fats, the leafy Greens those kinds of things by just making some increases can actually make

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00:40:22.050 --> 00:40:30.150

Daniel Monti MD: a big change in biochemistry. We're working on a study, right now, where we're going to show that actually after a few days of just having a good diet,

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00:40:30.750 --> 00:40:42.300

Daniel Monti MD: you can change a lot of your your markers including tumor markers and so sometimes people you know do rotating diets; sometimes people do

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00:40:42.870 --> 00:40:56.400

Daniel Monti MD: restricted calories, all of those kinds of things that all have positive health outcomes, but I think the thing is to have some flexibility in what you're doing and to just have these basic principles at mine to

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00:40:57.240 --> 00:41:06.900

Daniel Monti MD: not overindulge and to as much as possible not overindulge into as much as possible, keep adding in those health promoting products.

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00:41:10.080 --> 00:41:19.080

Daniel Monti MD: I'm mindful of the time so I'll speed it up a little bit so that we have plenty of time for questions and answers, and so this is a follow up study to the one that you saw.

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00:41:19.980 --> 00:41:28.080

Daniel Monti MD: One of the things about this is that in the risk category the hundred percent fruit juices and you may have heard of this had

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00:41:29.370 --> 00:41:31.740

Daniel Monti MD: As almost as high of a risk as

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00:41:33.570 --> 00:41:34.350

Daniel Monti MD: Things like

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00:41:35.550 --> 00:41:50.220

Daniel Monti MD: soda and I think it's because it's such a tremendous sugar load, the fructose load is more glycemic and even glucose, and so we have to be mindful of the fact that drinking a great big VAT of

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00:41:50.730 --> 00:42:00.300

Daniel Monti MD: Of juice isn't really the way to go, either people who like to juice for health purposes, I tell them to make those basic basic mostly non sugary

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00:42:01.470 --> 00:42:18.990

Daniel Monti MD: Things that they put through the juicer so not too many carrots not too many apples, maybe one carrot or one apple not more than what you would eat in a setting a sitting rather and then have a lot of the other things like carrot like cucumber celery and those kinds of things.

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00:42:22.470 --> 00:42:34.050

Daniel Monti MD: So one of the things to keep in mind is that body weight and diet directly and independently affect genes and health outcomes, so if there's excess body weight,

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00:42:34.800 --> 00:42:38.160

Daniel Monti MD: things that people can do, and I know that you have a whole Center at Villanova

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00:42:38.490 --> 00:42:48.090

Daniel Monti MD: devoted to this, one of the mechanisms that we look at that's a common thread to what I've been talking about whether we're talking about stress, whether we're talking about

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00:42:48.660 --> 00:42:56.610

Daniel Monti MD: eating too many of the bad foods, whether we're talking about an excess of having adipose tissue on the body is increased inflammation.

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00:42:56.910 --> 00:43:03.390

Daniel Monti MD: And the reason we really focus on that as a mechanism and it's one of those mechanisms that unites body and mind

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00:43:03.720 --> 00:43:11.970

Daniel Monti MD: is because we know that that mechanism inflammation makes everything worse, we know that inflammation fuels the disease process

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00:43:12.300 --> 00:43:23.250

Daniel Monti MD: of virtually every disease, you can think about in adulthood from cardiovascular disease, which has a clear inflammatory component to Alzheimer's disease, which has a clear inflammatory component.

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00:43:23.670 --> 00:43:32.370

Daniel Monti MD: And so the latest thinking and brain health, for example, is to eat an Anti inflammatory diet as much as possible. It's an Anti inflammatory diet- exactly what we're talking about-

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00:43:32.640 --> 00:43:38.820

Daniel Monti MD: minimally processed foods minimal sugar and lots of healthy plant based foods

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00:43:39.210 --> 00:43:47.820

Daniel Monti MD: and healthy oils. The oils are really important- that's why I wanted to spend a moment on essential fatty acids so Omega 6 and Omega

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00:43:48.360 --> 00:44:00.810

Daniel Monti MD: So when we talk about fat it's very confusing, because I think most people understand that there's saturated and unsaturated and unsaturated is better, for you know, especially for

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00:44:02.040 --> 00:44:15.750

Daniel Monti MD: blood vessel risk factors but it's not the total story, because there are relatively unsaturated fats that still are inflammatory so there's there's this saturated component which can

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00:44:16.620 --> 00:44:26.520

Daniel Monti MD: Add to atherosclerosis but then there's also the inflammatory component of the fat and so a lot of common

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00:44:27.900 --> 00:44:37.530

Daniel Monti MD: oils and fats that may not even be saturated can still be inflammatory and omega-6 fats are relatively inflammatory so these pro inflammatory.

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00:44:37.890 --> 00:44:42.990

Daniel Monti MD: And endpoints that you get to and which then you know

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00:44:43.440 --> 00:44:56.070

Daniel Monti MD: also go along with the pro inflammatory cytokines that we talked about versus anti inflammatory and points from Omega three fatty acids or or the Omega nines or some of the other ones that we talked about

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00:44:56.700 --> 00:45:08.910

Daniel Monti MD: are really important, because we want to make sure that our six to three ratio ideally would be four or five to one most people are like 20 to one.

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00:45:09.480 --> 00:45:14.610

Daniel Monti MD: Now, one of the tools that I like to use with patients, and I know many of you are nutrition experts

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00:45:15.390 --> 00:45:32.430

Daniel Monti MD: But I think that my fitness Pal, which is a government sponsored website really helps to sort of put to get to make people more thoughtful, more mindful about what they're eating. I teach nutrition course, we have a certificate in integrative nutrition in our department

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00:45:33.480 --> 00:45:44.940

Daniel Monti MD: for all healthcare providers and I teach the foundational course and I asked the students to actually go on to my fitness Pal and chart their own diets and I think that that's something that

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00:45:46.260 --> 00:45:56.370

Daniel Monti MD: is really illuminating to people they're like Oh, I had no idea that I was eating so much bad fat that I really wasn't taking in much good fat and everything else that they learned.

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00:45:56.790 --> 00:46:04.560

Daniel Monti MD: One of the things that I would just know too is, we need to have for for all of this to work well, even if we're taking in

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00:46:05.040 --> 00:46:14.040

Daniel Monti MD: good fat, we need to be able to sort of, we need enough of the right micro-nutrients so again it's a complete holistic picture because

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00:46:14.400 --> 00:46:22.620

Daniel Monti MD: just taking in, for example, an Omega 3 fatty acid supplement, but having a diet, to avoid in all of these things isn't going to do it.

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00:46:22.950 --> 00:46:27.660

Daniel Monti MD: We really need to when we think about supplements, it's fine to take a few supplements and sometimes

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00:46:28.080 --> 00:46:39.810

Daniel Monti MD: I even advise it and sometimes I take it Omega three fatty acids i'm just not getting enough of it, and I want to be able to balance these sixes but it's a supplement to a diet that has

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00:46:40.800 --> 00:46:50.430

Daniel Monti MD: The basic macronutrients and hence the micronutrients in there as well, that we need for optimal survival and optimal nutrition.

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00:46:55.830 --> 00:47:03.210

Daniel Monti MD: And we know that, for example, when we talk about brain health that getting enough of those healthy fats is important.

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00:47:04.350 --> 00:47:05.100

Daniel Monti MD: So.

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00:47:06.990 --> 00:47:17.220

Daniel Monti MD: let's talk about sort of if we're talking about a mind body paradigm i'm going to whiz this pretty quickly you know just food affect behavior how we feel you know so

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00:47:18.030 --> 00:47:21.120

Daniel Monti MD: I think the answer is pretty clear and it isn't just caffeine

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00:47:21.990 --> 00:47:31.140

Daniel Monti MD: which we well know about but the kind of diet that we eat can affect our inflammation inflammation we now know, has a direct effect

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00:47:31.560 --> 00:47:39.300

Daniel Monti MD: on things like depression so again it's if we think about inflammation is just one of those very important mechanisms

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00:47:39.630 --> 00:47:55.470

Daniel Monti MD: that weaves together mind and body we know, for example, that an inflammatory diet is also a diet that can lead to, or perhaps be a setup to not feeling our best not functioning our best and our mood not being in its best state.

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00:47:57.330 --> 00:48:06.720

Daniel Monti MD: And one of the things i'd like to end with as a concept is that I'm very you know sympathetic to the people that I work with as I'm sure you are that

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00:48:07.170 --> 00:48:17.100

Daniel Monti MD: the problematic foods are hard to give up and junk foods, especially ones that I don't mean to just pick on Oreos are not the only ones, but they are apparently America's favorite cookie.

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00:48:17.910 --> 00:48:30.780

Daniel Monti MD: But you know these types of foods are mass produced, but with a lot of thought behind them. Food chemists spend time how much crunch in or to weight in the palette to smoothness to

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00:48:31.740 --> 00:48:40.590

Daniel Monti MD: saltiness and sweetness all these different factors that will make the food is reinforcing as possible, and they test these things and large markets and often in

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00:48:40.830 --> 00:48:57.540

Daniel Monti MD: Third World countries to see you know what gives you the most reinforcing product and, over time, there is a psychological connection to them as well as the physical comfort that people get from them. In this one study with with rats,

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00:48:58.860 --> 00:49:15.300

Daniel Monti MD: Over time, these were more reinforcing than this, and another thing is that when people don't actually get you know adequate diet counseling or they just they get it, but they don't really internalize it.

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00:49:16.380 --> 00:49:26.550

Daniel Monti MD: There's always a subgroup of people after bariatric surgery when they can't take in as much of this go to another substance because there really is an addiction that has formed to some of these foods.

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00:49:27.990 --> 00:49:38.310

Daniel Monti MD: And the other thing that I would say is that you know, not even all sugars are created Equally, we know that the more glycemic something is from studies, like this one,

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00:49:39.720 --> 00:49:46.260

Daniel Monti MD: The more of a insulin response you're going to get but then correlating with that, the more

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00:49:47.370 --> 00:49:59.700

Daniel Monti MD: The more the different areas of the brain that have to do with satiety, hunger, feeling satisfied, all of those things are connected to whether to how

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00:50:00.150 --> 00:50:09.180

Daniel Monti MD: glycemic something is, for example, so when we look at reinforcing behaviors it's actually more difficult for people.

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00:50:09.990 --> 00:50:25.110

Daniel Monti MD: This particular study had different reward systems and things like that, and it was more difficult to get people to give up the fructose heavy food versus a glucose heavy food there's only one you know.

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00:50:25.680 --> 00:50:32.040

Daniel Monti MD: there's such a slight difference in the biochemistry of the two but there's a big difference in how they they act in the body.

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00:50:34.380 --> 00:50:38.430

Daniel Monti MD: So i'll just remind you of some of the top anti inflammatory foods.

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00:50:39.600 --> 00:50:44.220

Daniel Monti MD: If it's green it's usually good with with some exceptions, I suppose.

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00:50:45.030 --> 00:51:02.280

Daniel Monti MD: And if it grows it's good I usually say that with the exception of you know, some things but, overall, if green and grows and some of those terrific herbs and spices that people can easily grow in a pot can have tremendous phytonutrient value.

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00:51:04.320 --> 00:51:20.880

Daniel Monti MD: So i'll end by reminding people to keep their stress in check: this has not been the easiest year for many people, whether it's you can relate to that, personally, or the people that you serve it makes sense to just

281

00:51:22.110 --> 00:51:23.940

Daniel Monti MD: keep stress in check but also

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00:51:25.260 --> 00:51:36.360

Daniel Monti MD: reconnect to ourselves and in reconnect to a self care mode oftentimes at when we're when there's a crisis going on and we had a year of a crisis,

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00:51:37.140 --> 00:51:50.220

Daniel Monti MD: we often externalize- we often do comforting behaviors, so really taking care of ourselves in a way that's going to be helpful and help us to thrive gets left at the wayside so

284

00:51:52.200 --> 00:51:53.940

Daniel Monti MD: I thought I had another slide but maybe not.

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00:51:55.110 --> 00:51:59.580

Daniel Monti MD: Maybe that was the last one so with that i'm happy to take some questions.

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00:52:01.200 --> 00:52:05.160

Villanova Webinar 1: Okay, thank you, Dr Monti for a wonderful presentation.

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00:52:07.560 --> 00:52:11.640

Villanova Webinar 1: There is a remaining slide there, we will have a few

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00:52:12.510 --> 00:52:13.920

Daniel Monti MD: Is there one more after that one.

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00:52:16.110 --> 00:52:17.580

Daniel Monti MD: Oh yes, so.

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00:52:19.590 --> 00:52:26.010

Daniel Monti MD: I love to end on this picture, too, because people feel you know very guilty if they cheat sometimes but listen,

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00:52:26.400 --> 00:52:31.200

Daniel Monti MD: it's not about whether or not you cheat once in a while it's about what you're doing, most of the time.

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00:52:31.500 --> 00:52:38.100

Daniel Monti MD: So, most of the time, keep trying to add some of those health promoting foods, I think I have one more after this one i'm not sure why i'm.

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00:52:38.550 --> 00:52:52.230

Daniel Monti MD: not able to cope just two questions Oh, we did publish a book this year popular press that sort of puts a lot of these concepts together if people are interested in learning more and also Marcus institute dot Jefferson health.org.

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00:52:53.730 --> 00:52:57.030

Villanova Webinar 1: Okay, thank you very much, I especially

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00:53:03.510 --> 00:53:13.050

Villanova Webinar 1: Okay, so I especially Dr Monte appreciate the moderation in your approach that

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00:53:13.500 --> 00:53:32.850

Villanova Webinar 1: we're not superhuman and it is impossible to expect our our patients and clients to be superhuman as well, so just trying to reach for more of the healthy things and less of the unhealthy things, this is just a great way to to make goals achievable and realistic and so forth.

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00:53:33.870 --> 00:53:37.260

Villanova Webinar 1: Just a couple housekeeping tips, and then we have a couple questions.

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00:53:38.640 --> 00:53:53.700

Villanova Webinar 1: If you want to receive your CE certificate, we will be emailing you a link to an evaluation. All you need to do is complete the evaluation and send it in, and you will be emailed a certificate for participation with a CE credit.

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00:53:54.840 --> 00:53:58.500

Villanova Webinar 1: within five business days or so.

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00:53:59.250 --> 00:54:09.360

Villanova Webinar 1: COPE is celebrating its 10th anniversary this year, and so, to that end, we are pleased to announce that nominations are being accepted for the COPE Feeding the Need, Developing Solutions award.

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00:54:09.750 --> 00:54:20.370

Villanova Webinar 1: So if you know of someone who has identified a need-large or small-and was instrumental in the development of a solution, addressing that need please consider submitting a nomination.

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00:54:20.730 --> 00:54:30.000

Villanova Webinar 1: You may nominate yourself or another colleague. The winner or up to three winners will be announced in the fall and will receive a monetary award.

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00:54:30.510 --> 00:54:44.190

Villanova Webinar 1: So you can visit our website for more information. We do provide an online catalog of webinars and presentations so if you missed a webinar along the way, and want to catch up, you can search our catalog and receive credit for that webinar.

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00:54:45.600 --> 00:54:50.910

Villanova Webinar 1: Okay, so a couple couple questions, I think we all are

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00:54:52.710 --> 00:55:02.130

Villanova Webinar 1: barraged sometimes with questions about vitamin supplements so I'm just going to limit it to one question on that- Vitamin D, since the

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00:55:02.910 --> 00:55:27.510

Villanova Webinar 1: usual dietary sources are few for vitamin D and you know that someone is particularly at risk, what do you suggest, for those individuals and is dietary you know biochemical measurement of vitamin D, important as part of the assessment there.

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00:55:28.200 --> 00:55:37.740

Daniel Monti MD: I think that's a great question-it's a question that we get a lot, you know vitamin D is important, it is important, with many of our organ system functions.

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00:55:38.190 --> 00:55:55.140

Daniel Monti MD: There is correlation all data of vitamin D, with everything from depression to cancer, showing that people with very low vitamin D levels tend to have worse outcomes, this is even been shown with respiratory illnesses, which is why it was looked at, even with COVID.

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00:55:56.220 --> 00:56:08.370

Daniel Monti MD: It's not clear that supplementing vitamin D when somebody has an acute illness has much of an effect, but what we think vitamin D does is it has a protective effect in terms of

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00:56:08.700 --> 00:56:21.840

Daniel Monti MD: keeping the immune system and the rest of the organ functions in tact as much as possible. We also need sufficient vitamin D for bone health, but what our concern is especially women, as we get into those middle decades of life,

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00:56:22.920 --> 00:56:31.620

Daniel Monti MD: That the bones will be robbed of vitamin D when there's not enough of it circulating, and for many people there just isn't

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00:56:32.400 --> 00:56:40.020

Daniel Monti MD: I think it is important to check vitamin D levels, this is something that we've been struggling with with insurance companies, they accept it don't accept it accept it,

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00:56:40.620 --> 00:56:47.220

Daniel Monti MD: And so oftentimes we have this conversation, you know, would you be willing to pay for it, even if it gets rejected because

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00:56:47.610 --> 00:56:56.100

Daniel Monti MD: it's important to know what your vitamin D level is, I believe that it's one of those things that measuring makes a lot of sense because

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00:56:56.670 --> 00:57:04.050

Daniel Monti MD: by and large, many people I'd say most people that I test, who are not taking a vitamin D supplement need one.

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00:57:04.830 --> 00:57:10.590

Daniel Monti MD: And I think it's one of the things that makes a lot of sense to supplement. We know what the healthy ranges

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00:57:11.310 --> 00:57:18.690

Daniel Monti MD: for blood levels are vitamin D and actually you know say most labs at something like 30 to 70 but 30 still might be too low.

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00:57:19.050 --> 00:57:28.110

Daniel Monti MD: there's some top you know nutrition researchers who say really should be closer to 50 to make sure that we're not robbing it from anywhere else that needs it.

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00:57:28.830 --> 00:57:41.160

Daniel Monti MD: When there's an increased demand for whatever reason that there might be, so I think that you know vitamin D is something that we commonly tell people to take extra of specially during those winter months. As you mentioned,

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00:57:42.150 --> 00:57:47.520

Daniel Monti MD: we say you can't get much of it in the diet, very few people can get sufficient amounts of it in the diet.

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00:57:47.970 --> 00:57:55.350

Daniel Monti MD: You know, we tend to tell people to go low dairy or no dairy so people say uh, but what about vitamin D My response to that is

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00:57:55.950 --> 00:58:05.310

Daniel Monti MD: You know, as a nation we consume more dairy than we ever have and vitamin D levels are lower than they ever have been and the vitamin D and dairy is insufficient.

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00:58:05.850 --> 00:58:13.920

Daniel Monti MD: You know the primary way that we are engineered to get vitamin D is from the sun, but then we have to protect ourselves from the sun, because

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00:58:14.250 --> 00:58:26.430

Daniel Monti MD: we've destroyed the ozone layer, and so we have increased risk of skin cancers and things like that, with too much sun exposure so at the end of the day, a little bit of sunlight and probably a little bit of supplemental vitamin D is going to be the answer for a lot of people.

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00:58:27.510 --> 00:58:34.950

Villanova Webinar 1: Okay, thank you, we have time for about one more question You know we all I think appreciate the role of cortisol

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00:58:36.000 --> 00:58:48.990

Villanova Webinar 1: in stress and inflammation and so forth. Can you give us an idea of just how high cortisol levels need to reach in order to have clinical effects?

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00:58:50.340 --> 00:58:57.660

Villanova Webinar 1: What is the research saying in terms of that not that it's something that we're going to be able to necessarily in real life, be able to

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00:58:58.680 --> 00:59:02.820

Villanova Webinar 1: always have access to but help us understand a little bit.

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00:59:03.510 --> 00:59:05.940

Daniel Monti MD: yeah, this is a great question, too.

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00:59:08.130 --> 00:59:15.090

Daniel Monti MD: I'll give you the punch line which is we're not sure, and the reason that we're not sure is that there's different ways of measuring cortisol.

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00:59:16.170 --> 00:59:26.550

Daniel Monti MD: There's you know, in recent years, the salivary cortisol testing has gotten much better and it's convenient versus the other ways of trying to get it from the blood or urine and

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00:59:27.690 --> 00:59:47.520

Daniel Monti MD: which can be direct or indirect, and the other thing is the ranges are so widely variable and people can be under high level levels of distress, but you know how the cortisol levels react to that can not always be so significant. Sometimes in

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00:59:49.170 --> 01:00:00.750

Daniel Monti MD: laboratory animal studies, the level of stress that they need to put on the animal to create a high cortisol level is pretty profound and pretty significant.

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01:00:01.680 --> 01:00:10.800

Daniel Monti MD: We're at a lower level of stress, which still might be highly distressing doesn't isn't as reactive to the cortisol so

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01:00:11.430 --> 01:00:22.680

Daniel Monti MD: by and large, people usually in clinical trials and I used to review for the NIH lots of clinical trials, where people would look at salivary cortisol they would always look at something else too

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01:00:23.070 --> 01:00:36.750

Daniel Monti MD: knowing that the salivary cortisol wouldn't be sufficient because it's not that reliable, but what you do in a clinical trial is look at trends of those levels. So back to the

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01:00:37.470 --> 01:00:51.930

Daniel Monti MD: practical question of what makes sense to have an easy test that we can test cortisol and know if somebody is in a any high level of stress or not, I think that that is not reliable yet and i'm not sure if it ever will be.

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01:00:53.940 --> 01:01:00.390

Villanova Webinar 1: Okay, thank you very much. We definitely need to continue this conversation at some point.

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01:01:01.020 --> 01:01:18.240

Villanova Webinar 1: I want to thank Dr Monti for this excellent presentation and for giving us all, yet another reason to continue doing what we're doing and continue to strive hard to deliver this message of holistic health and baby steps towards

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01:01:20.010 --> 01:01:26.400

Villanova Webinar 1: improving our our health and lifestyles, knowing that it really does make a difference, so thank you for the inspirational talk and the for

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01:01:27.420 --> 01:01:31.890

Villanova Webinar 1: research that accompanies it, Best of luck with with all your work.

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01:01:31.920 --> 01:01:43.890

Daniel Monti MD: So thank you so much, and you guys are on the front line of it, so you know Hats off to all of you who are working with people every day and trying to help them make those changes it's it's such an important job.

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01:01:45.240 --> 01:02:00.480

Villanova Webinar 1: All right, thank you very much and take care, and thank you listeners, for your for your attention, we will be posting a new slate of webinars in the fall and look forward to your participation Thank you so much, Dr Monti take care.

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01:02:01.530 --> 01:02:01.830