

Transcript DMI Episode 1

Announcer: Welcome to the Mayo Clinic cardiovascular Continuing Medical Education podcast in collaboration with an educational content partner, National Dairy Council, a nonprofit dairy nutrition research and education organization that share science-based information on dairy's nutritional benefits for health and wellness. Join us for this three part mini series. To discuss nutrition and cardiology and gain valuable insights that can be directly applied to your practice. Please visit USdairy.com/nationalDairyCouncil for educational content relevant to the podcast series.

Dr. Kyla Lara-Breitinger: Hi everyone. My name is Dr. Kyla Lara-Breitinger. I'm a preventive cardiologist here at the Mayo Clinic and we are doing a three part podcast series on cardiovascular health and its intersection with dairy and answering all your questions. And it's my privilege and honor to introduce Dr. Maya Vadiveloo, who is an associate professor at the Department of Nutrition at the University of Rhode Island. And she's also our chair of the nutrition committee for the American Heart Association. She's also a registered dietician and a nutritional epidemiologist whose research focuses on using behavioral theory to favorably influence food choices, dietary quality, weight control, and eventually cardiovascular health. Her interests include using behavioral interventions and population level data to develop strategies that make it easier for consumers to choose healthy foods that are tasty and filling with the ultimate goal of helping individuals and populations develop lifelong dietary patterns that they enjoy and that promote healthy body weights. Her research in the big data and eating decisions lab employs a variety of research methods including epidemiological analysis, laboratory and online studies and implementation science approaches. Thank you so much for being with us and welcome virtually to Rochester, Minnesota.

Dr. Maya Vadiveloo: Thanks so much for having me.

Dr. Kyla Lara-Breitinger: It's so wonderful because you are the chair of the Nutrition Committee of the American Heart Association. And what better way to kick off our three part podcast series, but to introduce cardioprotective patterns since that's what most of us want to know about what is the secret to living with longevity and health span and protecting our hearts for as long as we can for the highest quality of life. And so thank you so much for joining us and I'm really excited to go into the rationale, you know, especially since the current guidelines do recommend low fat dairy, can we start off by talking about maybe the rationale behind low fat dairy for those out there who don't understand why this is part of the guidelines?

Dr. Maya Vadiveloo: Sure, absolutely. So I think you know, first and foremost, you know, low fat dairy provides important nutrients, right? We fortified with calcium and with vitamin D it's a source of protein and so it does provide a rich nutrient matrix for individuals. So, which is why it's sort of been part of the dietary guidance for a very long time. And in terms of the low fat piece, I think that also is really important in the context of both heart therapies because of the role that milk fat or saturated fat can be playing in, you know, cholesterol regulation and how that can lead to heart disease. But also just if we look at the broader, you know, obesity epidemic that when we're trying to, you know, fit in a lot of different types of foods to meet our nutrient needs for that sort of cardioprotective diet, sometimes we, you know, can preferentially have maybe another serving of fruit or another serving

of vegetables or are serving of full grains if we don't use extra calories in sort of the calories and saturated fat that don't necessarily have added value and could have adverse effects for, for help.

Dr. Kyla Lara-Breitinger: That's really awesome. And I totally love how you talked about how milk provides a lot of nutrients that you can get for the body, but also kind of weighing that with the amount of saturated fat to kind of adhere to the guidelines to reduce the overall content of saturated fat. But clearly dairy does have a role in our diet, but it's just a matter of how we select our dairy, especially 'cause in Europe that people ad libitum used dairy and depending on your overall dietary pattern rather than singling out a nutrient is probably what most of us feel in a scientific community. We should all kind of strive for when, especially when talking to patients or counseling, finding the, the low threshold of things to change like ultra processed foods and whatnot.

Dr. Maya Vadeviloo: I think it's, it is always just that, right? Like you know, in the field of nutrition we moved and, and rightfully so from understanding nutrients and the contribution of vitamins and micronutrients and macronutrients to health to one that focused, focused more on foods to now one that's really focusing on dietary patterns. And so you know, it's when we're looking at a shift in something or we're choosing one food in the context of a broad pattern, it's always about balancing what am I doing instead? So the goal isn't to, you know, reduce full fat dairy or replace full fat dairy where you know, like you said, sort of ultra processed high sugar foods or chips or other things just because they don't have saturated fat. The goal is really to use this as part of a strategy for adopting an overall heart healthy pattern that's rich in fruits and in vegetables and in whole grains and in nuts, seed and legumes and then can include if you choose to different animal sources like dairy and meat, poultry and meat.

Dr. Kyla Lara-Breitinger: Now what about people who you've met and who we've all counseled and even family members who are lactose intolerant? I know many of my family members I'm of Asian descent are lactose intolerant and they can't tolerate dairy. However, they will tell me they can easily tolerate dairy for like tres leches or some kind of sweetened baked good and they don't have any issues. But when drinking a glass of milk or drinking something that is more milk heavy, they can't tolerate that. Do you have any suggestions for people who are lactose intolerant who have a little bit of a sensitivity?

Dr. Maya Vadeviloo: Yeah, definitely. And I think, you know, this was something that I learned, you know, as a dietician, you know, many people including non-Asian descents will develop at the very least a secondary lactose deficiency. So you know, many people will talk about how when they were kids they were drinking glasses of milk or dinner 'cause it was sort of that centerpiece and then, right, people decide they no longer wanna drink milk as they get older. And then the enzyme that kind of builds up to break down lactose starts to go away for the vast majority of people. So if you go from having a relatively low dairy pattern, might not have an upper the enzyme to break it down. And so for people who are in that scenario, I usually advise starting with lower lactose products, so different yogurts and different hard cheeses to slowly kind of build that up or you know, there are a number of milks on the market if you choose to have a dairy-based milk that had the lactase enzyme in it to pre break it down. Or you can buy the lactase pills if you want to be drinking milk and you have that sensitivity and you don't necessarily plan to drink milk every day. But you know, a lot of those fermented foods and hard cheeses like Duke may have other, you know, beneficial effects

for you know, probiotics too. So I mean I'm a big advocate of increasing yogurt and other lower lactose products.

Dr. Kyla Lara-Breitinger: Absolutely. I totally agree especially with the, the French perspective cohort that's ongoing where they find fermented cheeses and dairies and different dairy products like that do have positive associations with reducing risks of overall mortality and stroke, et cetera. And so again, another reason to be more like the Europeans in some aspects. And so one question I have is when people think about dairy, sometimes they think about oh there's a lot of saturated fat, but can you tell us maybe about the protein content and maybe that how protein within dairy can help with satiation? And we know that in terms of the controversies with dairy being good for metabolic disease and helping with diabetes and then the data is up and down for Cardioprotective health, you know, data will be coming. Can you talk about maybe how it can help with glucose control, diabetes and kind of metabolic health or if you have an opinion on that at all?

Dr. Maya Vadiveloo: Sure. So I mean I think you kind of identified it well particularly when you're at the lower fat dairy where you're not necessarily as focused on saturated fat content, it is a fairly balanced food from a, you know, macronutrient perspective where you have about eight grams of protein per serving. So it's a high protein food and then you know the sugar in, you know, dairy not plant-based milks is coming from the lactose. So it's not added sugar, it's just inherent to dairy. And so that's what, if you're a diabetic, what you'd be counting for your carbohydrate but it's still balanced with protein and some fat. So you might have less of a glycemic response to a more balanced macronutrient profile than you do if you were say having juice where there's no protein. To kind of counter that in addition, just like fiber protein is considered one of the, you know, satiety nutrients. And that's not to say that, you know, Americans need to focus on eating more protein in general, the average American needs far more than they need and can, can still achieve that same sort of satiety and protein adequacy while still reducing total animal intake and increasing intake of plant-based foods. But the balanced macronutrient profile of dairy can, you know, help you feel a little bit fuller. And that might also be helpful in terms of, you know, maintaining energy balance in an environment where there's a lot of food pushed at us all the time and it's not necessarily the foods that we want people to be eating more of.

Dr. Kyla Lara-Breitinger: Absolutely. It's almost like this obesogenic environment is just everywhere. And you know, not to go off topic, you know, there's almost with the explosion of the GLP-1 receptor agonist and there's a big group of people who are like, no, these people have the capacity and the will to just choose the right things and to eat healthy. But depending on your zip code and culturally where you're from and what access you have, if it's all convenience foods, ultra process, high density, low nutrients and you need to feed your family and you don't have time to meal prep, it's very difficult. And so, you know, I think the more we make aware that we're as citizens of our country and even worldwide, we are consumers to what is being provided to us in mass. And so I I totally agree with you on that and that's so important out there for people to understand that just going exactly what you said to plant proteins, whole foods and then, you know, choosing low fat dairy over soda or sugary drink that looks like fruit juice and it's actually not. 'cause there's actually protein and probiotics and different things like that.

Dr. Maya Vadiveloo: Right. And, and not to go, you know, kind of too far off on this tangent, but you know, since we can, let's go off tangent. You know, I also feel like, you know, I talk a lot about energy balance and making sure that you know, you know, even in all, you know, dietary guidelines, there is that piece of, you know, you're choosing nutrient rich foods in a context of an energy balanced diet for weight management. But I think sometimes that message also ends up reducing the other message, which is that diet apart from body weight apart from its role and obesity is still leading risk factor for seven of the 10 leading causes of morbidity and mortality. And so even if we have you know, the use of GLP-1 to help people control weight, it doesn't mean that we shouldn't be addressing the food environment because it is a separate risk factor and the average US diet quality is really suboptimal. So there's so much movement at the population level that we have to do in terms of increasing fruits and vegetables, increasing whole grain intake, increasing the intake of plant-based proteins and making holistically healthier dietary patterns, which can look a lot of different ways depending on the culture, depending on, you know, what you have access to and cooking interest and needs. But you know, our food environment right now is not really supporting that and a very big advocate for changing the food environment.

Dr. Kyla Lara-Breitinger: Absolutely. I kind of have said it better. So just to keep going on kind of lactose intolerance since we kind of got off topic, how about dairy based alternatives? Are those the same? Are those more tolerable? Can you maybe for the people who don't know what a dairy based alternative is, maybe define that and give examples for us?

Dr. Maya Vadiveloo: Dairy based alternatives are really what most of us see in the grocery store when you go down the dairy aisle where you have your traditional milks, but then there's been an explosion of different products that are made with non-animal sources and that's really the big thing that differentiates dairy from dairy alternatives. So you know, historically the main dairy alternative that was available were soy based and that's still, you know, plays a role in the marketplace. But now there's almond milks, pea protein, whole milks, cashew milks, like a number of different nuts or other protein alternatives or blends of those. You know, I, there was actually a really good paper led by Lisa Harnick group out of, I believe Minnesota in the general of the Academy of Nutrition and Bionics and you know, where they did a real deep dive into assessing the nutrient content of plant-based milk alternative products available in the us. 'cause there is this question of like, you know, if people are making a one-to-one replacement, especially if they feel like, you know, they have lactose intolerance, they don't necessarily want to take a lactase enzyme or they may not be drinking dairy every day, so this is just an easier alternative. Or they may feel like maybe some of them have better environmental effects, though there is mixed evidence on that as well. And really from a nutritional perspective, it seems like the vast majority don't necessarily have the same nutritional composition as dairy based milks and the closest is generally soy milks. But right now, because of, you know, the way that we have health claims and other things on the label right now, a lot of the ownership is up to the consumer to both have the knowledge to read the label and to know what they're looking for. You know, sometimes you'll see things like this is low in calories, right? Like some of the all milks might be 30 calories, but they also are very low protein and they, you know, not all many are, but not all have calcium and vitamin D added to it, particularly for vitamin D. That's one of our primary sources of dietary vitamin D for most Americans. And again, we don't really meet our nutrient targets typically for calcium or vitamin D, which has implications for mental health, particularly with calcium. There can be that benefit or blood pressure which kind

of relates to our discussions on heart health because you know, blood pressure is the leading risk factor for stroke. And so, you know, I think if you're choosing a plant-based milk to you know, try to look for one that has a decent amount of protein to try and I mean if you're concerned about ultra processing, you're gonna be looking for things that don't have too many additives and have like a ingredient list that, I mean different proteins for the most part will be, will constitute an additive for ultra processing, but there are those that are not ultra processed. Additionally, you wanna make sure that calcium and vitamin D have been added and really be, and it's easier now to be aware because of the change in the good label of what is added sugar. So I mentioned earlier that the sugar in milk is coming from lactose. So if you read the nutrition label on a standard, you know, 1% or 2% milk, it should say zero grams of added sugar. If you look at most other plant-based milks, there's going to be some added sugar, but there are soy milks and things that have zero grams of added sugar and have a more comparable protein profile or almond milks that also are blended with pea protein seem to have higher protein content. But that's a lot to kind of keep in mind when you're shopping. And so, you know, I think finding your milk ahead of time trying to stick you might be the way to do it rather than trying to do that while you're hungry or while you have a child in tow is like, can I get this one?

Dr. Kyla Lara-Breitinger: I think, I think what you just said is probably the most important part of this podcast. That the level that we expect most people to understand versus what is labeled at the front as considered healthy requires a lot of mental energy and preparation that most of us feel like in this very high stress, you know, scrolling through, you know, videos that are 10 seconds long to slow down, you know, you see this whole row of liquid calories and you're trying to get the most nutrients to balance exactly what you said. And so, you know, for those of us who think, oh well you know, doing soy or almond or cashew milk, it's like so much healthier, but without knowing the added sugar content and if it's low in protein, it's almost just as bad. Especially if it's a vanilla, you know, based alternative, then there's probably, if it's a flavored type of alternative, it probably could have much as much sugar as soda or even juice. And so I think that is probably the most like helpful practical tip for everybody out there is that milk-based alternatives can be good. They could be, but they could be ultra processed. So making sure you look at the nutrition label and looking at the added sugar content because in most plain kind of dairy types of milk, it should, as you said, come from lactose. So that's really important and thank you for driving that home and I'm summarizing so that it creates more space for people to think about the next time in their grocery. And so lastly, can we talk about in total how much dairy people should be consumed and how to incorporate it in a healthy way? I know it's depending on who you're counseling as an individual, whether to give specific servings or grams that could overwhelm one personality versus some other personality might love that rigidity so they have clear instructions versus the eat in abundance, eat in moderation, you know, eat once a week and then eat on occasion like the holidays coming up.

Dr. Maya Vadiveloo: Well I think, you know, the biggest thing on that is that whether we're talking about dairy or we're talking about meat or we're talking about poultry or fish, none of them are essential to being included, right? But if you are not, if you, and so I don't want to say that, you know, two to three servings is what's needed because there are many people who are following lacto or ovo vegetarian patterns and they're choosing to limit animal products for any number of reasons. And you can still build a healthy dietary pattern that has adequate protein. And then you wanna be careful about some of the micronutrients like calcium, vitamin D and B12, particularly if

you're cutting out almost all animal products and iron as well. But you know, if you do choose to incorporate animal products in your diet and you're choosing some dairy, you know, two to three servings of low fat dairy a day, we'll get most people plus a balanced diet across the calcium that they need in their day of about 1200 milligrams depending on, you know, your life stage. And so I think, you know, you can incorporate it in a lot of different ways and it may also help with adhering to other healthy patterns, right? Like, you know, we know that for example, like the dash dietary pattern, which is one with more Mediterranean patterns, which are generally, you know, really good for heart health. They're very high in fruit and vegetable intake and sometimes, you know, I, I'm a big advocate for frozen produce because it can be more affordable and it is as nutrient dense, but at times people don't necessarily want the textural changes or you know, they're just, it can be difficult to fit in the seven to nine servings that are recommended. But if you're say blending low fat plain yogurt with a banana and with maybe some spinach or kale which doesn't have a strong flavor profile and some nuts, then you're getting a really nice balanced, you know, either significant snack or part of a meal where you're able to incorporate more fruits and vegetables and things. And it's kind of leveraged through also the addition of dairy, which, you know, it can be more difficult to do sometimes if you don't have that sort of binder. Another way that you can do it is like thinking about, you know, other substitutes. So maybe if you're, you know, having, you know, an egg kind of breakfast, maybe you can sometimes do a parfait that's low fat yogurt based great incorporating a glass of milk with a meal like we historically did for, for kefir. I'm a big, big push for kefir.

Dr. Kyla Lara-Breitinger: Can you tell, can you tell us all what that is for those of us who don't, who kind of can read it and maybe see it in a magazine or in an article but haven't had the time to Google it? And can you explain what it is and the benefits kefir?

Dr. Maya Vadiveloo: Yeah, I mean it's a fermented yogurt beverage and it comes in and so it has like, you know, a little bit more of that like sour notes to it. But actually it can be really quite nice as you start to get used to that flavor and it's really beneficial 'cause you know, we've talked a lot about the benefits of prevented foods and promoting a healthier gut microbiotics. So like, you know, when people are going on antibiotics, which many people are this time of year, you know, when you think about how do you replenish your gut microflora, you know, no grits one, but you know, kefir is another and that gives you some variety as well. So yeah, I think kefir, I, you know, I use the smoothies a lot actually using cheese as you know, in small quantities. You know, 'cause it, it actually doesn't take much to get to the serving, you know, if you're choosing full fat dairy just to do so in a way that like, you know, is aware of the serving size and is, you know, balancing it with other choices per saturated fat in your diet. So if you're choosing more full fat dairy products, perhaps really emphasized choosing more lean meats. Ideally we're doing both, but again, it's sort of, you know, we do have some flexibility on the Yeah, it's instead of what,

Dr. Kyla Lara-Breitinger: Right, right. Instead of what, well we really appreciate your time with us and this was so informative and helpful and practical and we all can relate and extract something that we can use the next time we're at the grocery store or selecting foods for our family. So I really appreciate all your help and thank you for all the work that you do for the AHAs chair of the nutrition committee. And I can't wait to see more of the wonderful work you're doing. So thank you so much again for joining us.

Dr. Maya Vadiveloo: Well thank you so much for having me and I hope everybody has a very happy and healthy new year and has some tidbits that they can take to the grocery store and it make our healthy choices.

Dr. Kyla Lara-Breitinger: Thank you so much and happy new Year to everyone. It's 2025, so let's live healthier and each better. Thank you so much everyone, for listening.

Announcer: Thank you for joining us today. We invite you to share your thoughts and suggestions about the podcast by emailing CVselfstudy@mayo.edu and find more episodes cveducation.mayo.edu. Be sure to tune in to each episode and tune in each week to explore today's most pressing cardiology topics with your colleagues at Mayo Clinic.