Boosting Bone Health through Nutrition

With Tamar Rothenberg, RD

National Webinar Transcript

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Presented by:

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Melissa Rosen:

Important information to cover this evening. Thank you so much for being with us tonight for this really important program on bone health and nutrition. My name is Melissa Rosen. I'm the Director of Training and Education. And tonight we have the privilege of learning from dietician Tamar Rothenberg, about boosting bone health through nutrition. I want to take a moment to thank our sponsors for this evening. They are Amgen and The CDC, The Centers for Disease Control Cooperative Agreement DP19-1906. It's thanks to support from places like this that we can provide this series of three webinars focused on bone health. Before we begin, just a couple of housekeeping items. Today's webinar as we noted in the chat box is being recorded and will be posted on Sharsheret's website along with the transcript, that will be up by the end of this week or very early next week.

Melissa Rosen:

As a reminder, participants' names and faces are not in the recording. But if you would like to remain private this evening, you can certainly turn off your video and even rename yourself or you can call into the webinar, and instructions are in the chat box for both of those options. You may have noticed upon entering that you were placed on Zoom. Placed on mute, excuse me. Please stay muted throughout the call. If you have any questions, feel free to send them in through the chat box, and we will do our best to answer them during the program or at the end at the Q&A session. We recommend that you keep your screen on speaker view. This will enable you to see Tamar's presentation as well as videos and slides that are going up. And you can find this option in the upper right hand corner of your screen.

Melissa Rosen:

As we move into the webinar itself, I want to remind you that Sharsheret is a national nonprofit cancer support and education organization, and does not provide any medical advice or perform any medical procedures. The information provided by Sharsheret is not a substitute for medical advice or treatment for a specific medical condition. You should not use this information to diagnose or treat a health problem. If you have any questions specific to your medical care, please speak with your medical provider. Always seek the advice of your physician or qualified healthcare provider with questions you may have regarding your medical conditions. As I mentioned before, today's webinar is the second in a series of three on bone health. Over the course of these webinars we'll provide a wonderful overview. The previous medical webinar on bone health is available to view on our website, and the upcoming webinar will focus on bone health and fitness.

Melissa Rosen:

Our follow up email with the recording and transcript of today's program will also include resources on bone health and nutrition. If you'd like to learn more about osteoporosis and cancer, Sharsheret has a great survivorship kit, Thriving Again, that comes with an exercise band as well as additional information on bone health and osteoporosis. If you have further questions, our social workers of course are always there to provide you with additional resources. Now, before we begin today's program with Tamar, I want to introduce Renee, who will be sharing her story with us. She was good enough to prerecord her remarks so that she could also be at her son's championship hockey game, which is happening as we speak. So here is Renee.

Renee:

[inaudible 00:04:45]-

Melissa Rosen:

There seems to be some problem with the sound. What we're going to do is work on that for a second. And if we aren't able to fix it momentarily, we're going to skip to the next part of the program and have this at the end.

Melissa Rosen:

I know that we have a team working on this, but not yet. Okay. So we're going to pause that. It's a great story, and if for whatever reason we can't get it to work, we'll include it in the follow-up email or something like that, but hopefully we'll get it to work at the end. Okay. Let's move on, because right now we are so honored to be joined by Tamar Rothenberg. Tamar is a registered dietician who specializes in recovery after breast cancer in her private practice in Los Angeles.

Melissa Rosen:

She has a certificate of training in vegetarian nutrition, is an adjunct professor of nutrition at Touro College and University, and co-led the clinical study, Coping with Cancer in the Kitchen, published in Nutrients. She is the author of a brand new book just released called Cancer Diet for the Newly Diagnosed. I actually got to see a preview copy of it, and it was amazing.

Melissa Rosen:

Tamar has partnered with Sharsheret on everything from webinars like this one, private talks for Synagogue Sisterhoods, to our new nutrition pilot program, where she offers three coaching sessions to Sharsheret callers over Zoom. Applications are currently closed for the pilot program, but will be opening up once more later this year. If you're interested in joining the wait-list for that, please email my colleague, Aimee, and her email is right there in the chat box (asax@sharsheret.org). Okay. Tamar, welcome and thank you so much for being with us. And I am so excited to learn from you this evening. You're muted.

Tamar R.:

Thank you Melissa, for the kind introduction. I'm just going to share my screen here. Okay. Can everyone see? Okay, great. So this is Nutrition For Bone Health. I'm Tamar Rothenberg. And I did get some questions before, I hopefully will be answering them throughout the presentation. And of course, if you have more, they'll be addressed as well. So I just want to show you, if you're not following Noodle, you should on social media. When he decides to get out of bed, then it's a bones day. If he doesn't, it's a no bones day. And so today is a bones day, and if it's a no bones day, that means you are not allowed to wear hard pants, so just so you know. Anyway, I just really adore that little pug.

Tamar R.:

All right. So let's get started. What are we going to be talking about? We're going to talk about How Bones Change with Cancer Treatments, and they do, some Key and Supportive Nutrients because it takes a team, it's not just one nutrient. And then how do we apply that information? I'll give you some Nutritional Solutions, and of course, a Bone Strong Recipe, which I'll show you. And we'll have time for a Q&A. I did want to point out, this quote is from Deanna Attai, who's a UCLA breast cancer surgeon, who says that her studies show that over one-third of breast cancer patients feel that their side effects are not taken seriously. So we have to keep that in mind.

Tamar R.:

Okay, so this image. I remember in dietetic school, this image really freaked me out because this is a CT scan image. On the left you see a so-called normal bone. And what do you see on the right? This is a bone that has osteoporosis. Now, bones are made up of living tissue. They have to be nourished to stay strong. And what happens, whether it's cancer treatments or age, or someone who was underweight, or someone who has in the past or present an eating disorder, or even depending on ethnicity, will experience these effects. So you see the difference, there's larger spaces between the bones. The bones are very thin. They're supposed to be like a honey comb shape, and they're disconnected. So can you imagine if this person falls, they have a very high likelihood of fracturing or breaking a bone. Now, this doesn't say where it's from, but because of this type of bone, it's usually found in the spine, the hip joint, or the thigh.

Tamar R.:

So how do bones change with cancer treatment? We know they do. We know the effects. So when they started prescribing aromatase inhibitors, they noticed of course, women were getting these symptoms. It's called AIMSS. The studies focus on why that happens, whether it's joint pain or osteoporosis, or bone density. So a lot of it has to do with, if you're on aromatase inhibitor, your estrogen decreases as it does with menopause. So now the bones are less protective because just like with your heart, estrogen protects the bones as well. And some estrogen is found in the cartilage itself. So now the cartilage which lines the joints are thinner, and they become prone to damage and inflammation. And if you've noticed, their grip strength also decreases. Grip strength is really a sign of quality of life. You notice if things are harder to open, everything seems harder. Because of that, your pain threshold is lower, and so you become more sensitive to pain. So women are not making this up. You really do feel more pain than other people when you are experiencing these effects from the medications.

Tamar R.:

So continuing on how they change, symptoms usually begin, if you probably noticed, within six weeks of starting aromatase inhibitors, and up to 50% have bone pain. That's half the people who are prescribed that. But 91% of patients do experience some kind of side effect to such an extent that about 20% to 30% just stop taking it. And that's very tough to hear because it's a life saving medication. Most of the pain is in the hands, the knees, the lower back, and the feet. Now, the difference between aromatase inhibitor and Tamoxifen, it seems that Tamoxifen is more protective of bone density. Now bone density, one of the questions I had was, "Can you just rely on nutrition and not take medications to replenish bone density?"

Tamar R.:

So of course, that's going to be a conversation with your doctor, but generally, if you are being prescribed these medications, it means there is quite substantive bone loss, which won't be regenerated just with nutrition. You do need these medications. Exercise and nutrition, what's their role? It's to preserve muscle and bone, decrease inflammation and pain along with that, decrease recurrence, so you do need the meds to rebuild. So that's again, a conversation that you have to have with your doctor.

Tamar R.:

All right. So what are the primary nutrients? Calcium you've all heard, but I'll go into detail about what to expect. Protein. People forget about protein, they just think about other nutrients. Definitively you need protein. Vitamin D is essential. Magnesium, getting enough magnesium for your food. And this

may be surprising. You do need Omega-3 fatty acids, and I'll explain why. And then in a supporting role, it's a team effort. It takes a village. You'll need vitamin A, B12, C, and vitamin K. And there's a few others I'll go into, but these are the main ones that we really have to focus on. And if you're having a varied diet, very heavily plant-based, you will get most of these nutrients that you do need.

Tamar R.:

So let's start with calcium, and I'll show you, these are the recommended intakes. So what do you notice here that during a growth phase like adolescents, your calcium needs go up because you're building bone. Then it stabilizes. Then it goes up during menopause, and it rises significantly past the age of 70. Now, why is that? So 90% of your calcium is stored in your bones and your teeth. Now what happens as you age and after menopause, bone breakdown, the rate exceeds formation of bone. That's what leads to the rapid bone loss. So the way bone repairs itself, it has to go through continuous remodeling, it's called resorption and deposition. If there's not enough calcium in your bones, the 90%, then your blood will take the calcium from the bones because you need about 10% in your blood. So that's what we mean by leaching calcium. Your blood will take it first.

Tamar R.:

So a couple of things to think about with calcium, it does interfere with iron absorption. So if you're taking an iron supplement, take it separately from calcium because you won't absorb the iron as well. If you're eating iron rich foods, don't take it with the calcium supplement. Just keep those things separate. Calcium can interact with antibiotics, thyroid medications. And then let me just address, there are three types of calcium supplements. And it's a little confusing because there's so many different ones on the market. So the three types, calcium citrate, which is the most prescribed. You can take that with or without food. That doesn't depend on gastric acid, so that is the one that's usually prescribed if you have low acid or if you are on medications to stop gastric acid. The second type is called calcium carbonate, and that does require gastric acid to absorb. It's cheaper though.

Tamar R.:

So if you don't have the gastric acid, the carbonate's just fine. They're both equally effective. And a third type, this was one of the questions that I got, is called coral calcium. And it's a carbonate that's made from fossilized shells. It's absorbed very easily. It's just as effective as the other three, so you do have your choices. The only thing I would say is avoid using calcium that's made from something called unrefined oyster shells, bone meal, or dolomite without a third party certification. And that's because these can be very contaminated with lead and other toxins. Okay. The last thing I want to say is that calcium absorption is affected by caffeine and also low vitamin D. So that's why I say there has to be a team. All these things have to work together. Calcium absorption decreases with age naturally from about 60% to less than 25%, which is why you see you need more at an older age.

Tamar R.:

Okay. But what does that look like on the plate, if I say you need 1200 milligrams of calcium? I wanted to show you how that can be done in a non-dairy meal. If you're eating dairy, it's a little easier, but you don't need to. As you can see here, you can find it in non-dairy foods. So the reason I put these specific foods is these contain a high rate of calcium absorption. There's something called bioavailability, meaning the food contains calcium that is easily digested and absorbed by your body. So you can only absorb 500 milligrams of calcium at a time. Let's say you're taking 1000 milligrams, you'll need to split

that dose throughout the day. So if you're eating this kind of meal, you could choose three and a half cups a day of any of these combination of foods and get the 1200 milligrams that you need.

Tamar R.:

So you would choose cooked veggies, the cruciferous, what we call. This is broccoli, cauliflower, arugula. And that's cooked. If you're going to eat raw, you'll have to double the amount. And then any combination of tofu. Go for the calcium sulfate because that contains the calcium salt, and you would get more calcium. And then any combination of fortified plant milks or juices, the key is getting it fortified. There's so many plant milks now on the market that you can get the same amount of calcium that you get from milk.

Tamar R.:

I do want to say that soy is perfectly safe for breast and ovarian cancer survivors, and that it is also protective against fractures. Usually there's all these myths around soy. I don't know if you could see this. I just want to point out some plant-based milk options that are, in context, in relationship to cow's milk. So what's in an eight ounce glass of milk? Just take a look at the calcium. You have about 30% calcium in cow's milk, and even if it's fortified, you're getting even more with soy milk. And there have been studies that it's just absorbed the exact same way as cow's milk, so you're not missing out by choosing a soy milk.

Tamar R.:

The same with almond milk only if it's fortified across the board. And then the other thing I want you to take a look at is the protein. What do you see? So cow's milk is eight grams protein. So is soy, so you're really not missing out. Almond milk is good for flavor, but literally no protein. It's really just almonds with a lot of water, but people like it because it's bland, and you can use it for cooking. As you can see, you don't really need the dairy for the calcium or even vitamin D, you can get it easily from plant foods if you wish.

Tamar R.:

Okay. So our next star is vitamin D, which I'm sure you've all heard about. Why do we need vitamin D? Because that's what gets calcium into your body. And it maintains the level of calcium and helps with bone mineralization. We do need it to grow bone and to what we call remodel bone, whether it's breaking down or building up. And if you have insufficient vitamin D, which many of us do have now, the bones can become thin, brittle, and in extreme cases, this doesn't usually happen in the US, misshapen.

Tamar R.:

So how much vitamin D do you need? I want to say it depends because really you should get your labs done. I know they're not doing it automatically anymore, but it really depends on your lab levels. You just shouldn't take it indiscriminately. There is a high dose you don't want to get to, but they're changing it now to milligrams to make it more consistent with other minerals. This is now still IU. You need about 600 to 800 to keep your levels steady. But it depends, like I said, about your blood levels.

Tamar R.:

Okay. Protein. Remember I said it's very important. So it is important, you have to get enough to sustain your muscles, which protect your bones. I find that actually people think they're getting enough protein, but they're not. So it's very important for bone health and to prevent osteoporosis. It gives your bones

strength and flexibility. Of course, it's a big component of muscles. But it's important if you fall, because if your muscles are stronger, first of all you may fall less, and it will protect you as much as possible when you fall. Protein can be found in plant-based foods or in animal foods.

Tamar R.:

So here's the one that's pretty recent that we've discovered, Omega-3 fatty acids. Think about the oily fish or nuts, or walnuts. What they found in this study was that, they did a clinical trial where they gave women, this is a very high dose of Omega-3, you'd have to be prescribed this and check with your doctor if it was safe, but they gave them over three grams of Omega-3s. And within 12 weeks, they had substantial improvement in pain, in symptoms in both arms, they used less NSAIDs, and the number of joints affected were fewer, they had less stiffness. And they measured their pain, and there was significantly lower pain scores, especially in higher weight women. So this is very important, get your Omega-3s, whether it's through a supplement. There's now vegan Omega-3s you can try if you don't like the fishy taste. There's salmon, don't forget about nuts and seeds, they're filled with that good stuff.

Tamar R.:

Okay. So another key nutrient is magnesium, and it turns out that the majority of Americans are deficient in magnesium mostly because they're not eating a lot of dark leafy greens. Magnesium is part of the structure of bone, and it's the one that transports calcium to your bones, so it's really very important. 50% to 60% is present in your bones. Where can you get magnesium? Again, seeds, nuts, dark veggies, and greens, all that good stuff. You’re making a salad, put some nuts and seeds on top of it, and you're getting your Omega-3s.

Tamar R.:

So these are the supportive nutrients that I'll just go through, and I'll talk about the foods you can find it from. Vitamin A, which is your orange, yellow veggies. Those help form the bone building cells called osteoblasts, and then the bone breaking down cells called osteoclasts. Now, more isn't better. You probably don't need to take a supplement, I wouldn't suggest that. Just get it through food because it's linked with lower fractures. That should be high. If it's too high, you'll have lower bone density. So you want to keep it at the right level. And then B12 is another one that's very important. Especially if someone is vegan, they need to supplement it because without it you'll have a higher risk of bone loss and fractures. So most people still need to take B12, even if they're not vegan, so just check with your dietician or doctor about that.

Tamar R.:

B12 is only found in animal foods, which is why vegans need to supplement it. It's not found naturally. A few more supportive nutrients. Vitamin C, it's essential to form collagen. When people tell me, "Should I take collagen?" I'm like, "First take the vitamin C because you need that to form the collagen." So you also have greater bone density. You can find that in citrus fruits, you can find that in any colored pepper, like red peppers, they even have more vitamin C than oranges, green peppers, any color. And then the newest kid on the block is vitamin K, specifically vitamin K2. So there's a lot of research showing that it does help regulate vitamin D so that things are regulated in the body. The vitamin D level stays up and attracts more calcium to bone. If you have low blood levels, you have increased fracture risk. So you'll see a lot of calcium supplements now combine K2, but research doesn't support supplementing K2 yet. It can interact with other things too, so it's something to check.

Tamar R.:

Okay. And finally, the rest of the supportive nutrients. Boron. Boron is a mineral that reduces osteoarthritis and bone pain. You can find that in dried plums. What we used to call prunes is now dried plums. So dried beans is a good source, fruits, veg, nuts, and lentils. Now phosphorus is very interesting because actually we're finding people have too much, and that's because it's found in a lot of processed foods. So just reducing processed foods can help with that. And then potassium intake. We do need more potassium because eating too little, it'll start to draw calcium from the bones. Where do you find? That's in dried fruit, lentils, so lentils is a star here again, avocado, and winter squash. And finally zinc. So you heard a lot about zinc probably during COVID. It's not something you can take regularly. It should be taken short-term, but you can get it through food again for collagen formation. You can find that in nuts, in animal foods, and even in fortified cereal.

Tamar R.:

Okay. Finally, let's talk a little about supplements because I know that's a big question. I'm not recommending, I'm just pointing these out here that these are... Because supplements are not regulated by the FDA, so it's very hard to know what's in them. So you do want to find supplements that have a third party label, and they'll have a symbol that's either a USP or NSF. So one, this TheraCal is a nice combination of calcium, D3, magnesium, K2, and boron. So those are all the ones we talked about. If you want a gummy, there's a Smarty Pants, this is by Bayer, for women over 50, which I like because it has fish oil, but it doesn't have calcium. So you need to supplement possibly.

Tamar R.:

The other things that may help with pain is CBD oil and then Omega-3, and collagen. Now, the glucosamine and chondroitin, these have very little evidence to back up that they help, but some people say it helps them. So check with your doctor if that's okay. And let's not forget about herbs and spices. First of all, they're fun to eat, but they also interrupt the inflammation pathway, so you can reduce inflammation that way. And these are some stars which you probably have in your pantry already. Ginger, turmeric, capsaicin, cloves, cumin, fennel, anise, garlic, rosemary, basil, and green tea is an anti-inflammatory as well.

Tamar R.:

Okay. So I know the next webinar is on exercise, but I'd be remiss if I didn't say it at least. The things that have been shown to help the most are massage, acupuncture, Tai Chi, therapeutic yoga, swimming, really any movement will help, dancing, whatever you can do, gardening, because we find that after breast cancer, women are sedentary an additional two hours a week. So we really need to get out there and move however we can, find what we call joyful movement that you can do every day.

Tamar R.:

So putting it all together, let's look at some nutritional solutions. What we're finding is a pattern of eating. So the Mediterranean diet can be very helpful, vegetarian diet, or just adding as many plant foods as possible reduces pain and inflammation, and protects bone if it's done properly. Like you're getting enough protein, the things that I brought up. What's interesting, research coming out of Tufts University Bone Metabolism Laboratory is that citrus fruits and vegetables are particularly helpful. And then reducing refined grains will also help with pain and inflammation. So as you reduce refined grains, then you can include more. You'll have more room for the citrus fruits and the fruits and veggies, and that seems to reduce pain as well.

Tamar R.:

So let's look at, what are the food sources. It's a little hard to see, but you'll get an ebook I think at the end, right? That will have some of these ideas for you. What I want to point out is bok choy, is very, not only high amount of calcium, but it's easily absorbed. One cup has about 80 milligrams, which is really a good source. And then your protein, magnesium, you want to focus on let's say pumpkin seeds, chia seeds. Beans are the star of most of these because beans have protein and potassium, and things like that. Vitamin D, we can't get enough from food usually, but mushrooms are new, they're called UV enriched mushrooms. They have to say that. Basically they've been put under a UV light, and they contain as much vitamin D as a supplement possibly, so look for it now. That's an easy, delicious way to get your vitamin D.

Tamar R.:

I did get a question about AlgaeCal during the supplements. I will say that it looks interesting. I've only heard anecdotally about it, but their clinical studies are all sponsored by their company, so we have to be a little wary about that. But if you want to try it, I don't see why not. So what would a day look like of eating most of these requirements that I talked about? So you could start with orange ginger overnight oats. You're getting your citrus, and you're getting your oats. Lunch, I'm going to show this video on a kale salad with creamy tahini dressing. I'll explain why. And then protein. It could be tofu, could be chicken, beans, or lentils.

Tamar R.:

For snack, Greek yogurt, if you want plant-based, fortified, or regular topped with berries. And then almonds are particularly helpful it seems for bones. For dinner, you could get your seeds by making a seed crusted salmon, your roasted broccoli, and brown rice. And dessert, protein brownies. So you can make it with tofu or avocado, or black beans, or even prunes. I will tell you it does not taste like a brownie so don't expect that, but it's just another way to get your nutrients. And fortified soy milk, a cup a day is a great way to get more calcium.

Tamar R.:

Okay. So I want to show you this video. This is the kale and tahini salad. So I'll narrate a little as this goes. Why are we using kale? Very high in calcium that's highly absorbable, really easy to make, and the dressing has tahini, which is very high in calcium. So this is a win-win dressing. And what's important is you'll see how to prepare the kale. Now you can use another type of green. I wouldn't suggest spinach because that disrupts actually calcium absorption, so use the spinach for something else. Now kale is very spoiled, and it likes to be massaged. So what happens when you massage the kale? It becomes very green and soft. And people often forget this step, and they don't like kale because of it.

Tamar R.:

So it's just a few minutes. You'll see it's turning green here. And then you're going to toss it with your dressing. And the nice part of this recipe is you're using crispy chickpeas as croutons, so you're getting extra zinc and fiber really easy. You're roasting it for about a half hour, depending on your oven it may take longer. Isn't that pretty? You can spice it up here and top it with nutritional yeast for extra B-12. Doesn't that look good? You hungry yet? Okay.

Tamar R.:

So just to sum up, this is what a bone supporting plate would look like. You have your healthy fats, your bell peppers for vitamin C, your UV mushrooms, all kinds of leafy greens. You could have your spices like ginger root, turmeric, sweet potatoes, your fruits, any type of fruit, particularly the citrus fruits, again, water and other beverages, green tea is a good option. Your whole grain seeds and nuts. So again, here you have your almonds, your pumpkin seeds, which is filled with magnesium, chia, hemp, if you like that. Flax is particularly protective for breast cancer. And protein could be salmon, beans, eggs, chicken, or yogurt. I did include here fermented and pickled vegetables because they are really healthy for our microbiome, which affects our immune system, which is really important if your bones are affected.

Tamar R.:

Of course, we're not going to eat like this every day. We're just looking at what you were eating on a weekly basis. That's what's important. Your pattern of eating. It doesn't have to be perfect every day. No one can really do that, so don't. This is the ideal, and just think of what foods can you include in every meal from some of these options. So these are my services, recovery after breast cancer, other health conditions, endometriosis, PCOS, IBS, foods that reduce your risk of cancer and recurrence. And I specialize, as you saw here, in vegan and vegetarian health. This is where you can reach me on Instagram or Facebook, I have a Facebook group private one for Thrivers. And here's my new book. So it's a guide and a cookbook for the newly diagnosed, it's for all types of cancers. And each recipe has the side effects that it treats. You're welcome to take a look, it's sold wherever books are sold. So thank you very much.

Melissa Rosen:

Thank you so much. There was so much information coming in. So first, I just want to clarify a couple of things. This was recorded, it will also be transcribed, so you will have a chance to look at it. The follow-up email, in addition to links to the transcription and the recording will also have a supplement that Tamar has provided, including the recipe that was in that video because I saw a couple people ask for that too. And then although there were possibly larger questions, maybe even more important questions, several people were horrified that they shouldn't be using spinach because they use spinach in smoothies and with their eggs. And what if you don't like Kale? And your normal go-to is to use spinach instead. What are some other leafy greens that work?

Tamar R.:

Well, you can use spinach. I have nothing against Popeye. It's just that it's not a good source of calcium. It's a perfectly good vegetable, so I want to make that clear. A lot of people don't like kale, and that's okay. So use bok choy, use another green. We're just talking about calcium here, when I was talking about spinach. It has something called oxalates that block the calcium absorption, but it has iron, it has other great things. So I want to clear that up. Yeah.

Melissa Rosen:

Swiss chard would work? Arugula?

Tamar R.:

Yeah. Those are great options. Yes. Any dark leafy green, sure.

Melissa Rosen:

Okay. Amazing. All right. I'm going to start down this list. It's a big list. So you did mention something about the AlgaeCal, I get that. But something that was asked tonight that I had never heard of before was liquid ionic calcium.

Tamar R.:

I haven't seen that, honestly. I don't know what that is. I don't know why it would be called ionic. Calcium is a mineral like everything else. So if you can tell me more about it, but I haven't heard about that.

Melissa Rosen:

Okay. All right. Great. So if more shows up in the chat, maybe we can revisit it. But in the meantime, let's ask some other questions. So somebody asked, is bone density loss reversible? And if it isn't reversible, or even if it is, how do you prevent further deterioration after evidence of osteopenia or osteoporosis?

Tamar R.:

Right. So bone density, generally most of it is lost once it's lost, so really prevention is the way to go. But we can't necessarily prevent it when we're going through cancer treatments. It does have an impact on our bones. And also because we're more sedentary during cancer treatments. So medications are the only thing that can really up your bone density, and it has to be together with exercise and nutrition. So nutrition supports the medications and nutrition is really more effective for not losing bone density, along with resistance exercise. Those two things are the pillar of keeping your bones strong.

Melissa Rosen:

Absolutely. Another plug for our Thriving Again kit with the resistance bands, very important. And by the way, if you've already received a Thriving Again kit, but you want specific bone health that wasn't included in your first one, you can request that just by emailing clinicalstaff@sharsheret.org. Okay. A couple of questions about dairy. Maybe some myth busting, we'll call this. So somebody was told by their doctor that dairy leaches calcium from our bones. Is there any truth to that?

Tamar R.:

Not that I know of. Calcium is leached when there isn't enough. It's nothing you do with dairy.

Melissa Rosen:

Yeah. Absolute opposite. And what about the idea that the hormones in milk would trigger tumor growth?

Tamar R.:

Right. So first of all, in terms of breast cancer, premenopausal breast cancer, dairy is actually seen as protective. Postmenopausal is neutral, meaning it doesn't protect and it doesn't harm. Now, there's emerging research in terms of ovarian cancer, that there may be a link between dairy and ovarian and prostate. It's not strong enough to say don't have dairy. So you have to decide if that's something you want to do, we can certainly meet our nutritional needs without dairy.

Melissa Rosen:

I'm going to take part in this next question. You've been clear that we can't reverse bone loss, but what about slowing it without taking the osteoporosis drugs? Is it possible to slow it without adding another prescription to our diets?

Tamar R.:

Right. So that's what I meant by, that's a conversation with your doctor. It depends on the rate of your loss, how fast is it, how much is lost already. That's something that needs to be seen on tests and your t-score. It's very complicated to decide that. It's not something I can really answer off the cuff. Yeah.

Melissa Rosen:

That's fair, and I appreciate that. Okay. So somebody asked a more general question, and this is right up your alley, I believe, about diet in relation to recovery from cancer, that there are so many books out there, or information out there, videos on social media, "Do this, do that, don't do this, don't do that." So from a scientific, well-researched perspective, can you just give a couple of general recommendations? Not necessarily for bones, but just in general for recovery from breast cancer or any cancer?

Tamar R.:

So what has the most evidence is of course, smoking, alcohol, and reducing red and processed meat. When I say reducing, it doesn't mean eliminating, unless you want to. Red meat, there's a safe zone, but processed meats really should be taken out of your diet. We do see that's the strongest evidence for a higher risk. Now to lower risk is exercise. It can lower recurrence rates by more than half, so it's very, very strong. Yeah. They even give doses for how much exercise will reduce whatever side effect, whether it's anxiety, depression, all side effects from cancer.

Tamar R.:

And proper nutrition, what I mean proper nutrition is getting the nutrients you need to support gut health and protect your immune system, and things like that. So everything else is kind of getting that right. And we don't have to be perfect at it because we know none of it is our fault. And we're talking about reducing our risk, not necessarily preventing. So there's nothing you did to cause your breast cancer, but there's more you could do to recover.

Melissa Rosen:

Like they say, excellence is the enemy of good or something like that. Okay. So somebody else asked about how much difference does dietary calcium intake actually make in building healthy bones. And is there anything, as a secondary question, we can do to amplify the impact of either dietary or supplemental calcium? I'm pretty sure you mentioned this, but maybe even specifically talking about, if you're taking supplemental calcium, don't eat spinach with it. That was a big deal for people, but what might you eat with it? Like certain things, I know iron is better absorbed with citrus, so something like that. Are there any equations there we should be aware of?

Tamar R.:

Well, I talked about the iron, so that's the main one. It depends on how much is actually absorbed by your body. Some foods are what we call more bioavailable, some foods are less. So really, you just need

to get a combination and a variety of foods. I see people tend to have the same thing every day. You want to mix and match a little more and that way you get what you need. Supplements are just as easily absorbed as from food. Okay. So like I said, as we age, we need more calcium. It's very hard if you're dairy free to get enough, so you may need to supplement. So it's the same whether you're getting from supplements or from food, it's just a mineral that's absorbed.

Melissa Rosen:

And it sounds like you're saying, and if I'm understanding you correctly, it's a point worth emphasizing, that unless there's a specific medical need, which of course somebody would need to go to their doctor for, in general, people don't need to worry about how many units or milligrams they're getting of everything. If they have a well-balanced and a lot of variety, they'll get most of what they need through that?

Tamar R.:

Yes. I will say that, but what we see on a population level, probably not this group, but on a population level, 90% of people are not eating a cup of fruit or vegetables a day. That's where we see the deficits. So you need about five cups or more of plant foods. What I showed was the combination. That's what you want to aim for, a combination of those foods to get what you need. It's best to work with a dietician.

Melissa Rosen:

And we will be opening up the... You can get on the wait-list for the program you're doing with Sharsheret. We're getting close to the end, and there are so many more questions. Can you talk for a second? So there were a lot of questions, which you're not going to answer clearly about which is the best, Fosamax, Zometa , Prolia, things like that. That we're not going to answer, but two questions in terms of those types of drugs. So one is that some of us have heard that some of those drugs can lead to osteonecrosis. So how can a drug be prescribed to build up bones and then be accused of taking down bones also? For lack of a better way to phrase it.

Tamar R.:

That's a great question. It may have to do with the rate of bone building versus bone loss that's always happening in our bones. You know what I find is ask your pharmacist if you can't reach your doctor, they know this stuff backwards and forwards, and they're a great source. I talk to them all the time. They really know these drugs. So I would ask them and of course, your doctor as well. But if you're being prescribed it, then the benefits outweigh the risk for most part. Again, it's a conversation with your doctor, but it means that might be the best choice for you.

Melissa Rosen:

Okay. A couple of people asked about calcium, and if you get too much, it might lead to problems with arteries or blood vessels. Is there any truth to that? Any warning signs?

Tamar R.:

Yeah, that's a great question. We only see that at toxic levels. If you're getting way too much calcium, you are going to start having this calcification. First of all, you don't get it through food. It's only through supplements if you're taking too much. So that's why I always talk about, don't have too much of anything, whether it's the supplement. Food is the safest thing, so you can't get too much of that.

Melissa Rosen:

Okay. That's great to know. All right. I'm going to ask two pretty simple questions, hoping that they'll be easy answers. So somebody pointed out, for people who have trouble taking calcium supplements, this is a great option if it's actually true, that instead of taking calcium supplements, you might be able to just take TUMS?

Tamar R.:

Yes, I did hear that. You can. Yeah. That's I think calcium carbonate, which is okay. So yeah, I think that's an option. I think that was heavily used in the past. I don't know if so much now, but yeah. It's a viable option.

Melissa Rosen:

That's great. My last question is, can you talk a little bit about collagen? Several people asked questions about collagen. So I'm not even going to ask a specific question, just ask you to comment on it.

Tamar R.:

Right. So I've changed my mind. I used to poo-poo it. Like, "What do you use collagen for?" But the research is showing that it can help with collagen formation. I will say that it doesn't help with anything else that a lot of people think it helps with. It may help with skin and with bones. Apart from that, it's not a magic potion. The only thing, I would be very careful. Again, the source of the collagen is very important.

Tamar R.:

If it has a third party label, a lot of these supplements have contained lead or other things that you don't want. So check the source of the collagen. So I do think it's perfectly fine to put in a smoothie or something like that. It's not for protein. I wouldn't use it as a protein source for people. I had clients that were using it as a protein source. That's not a good way to get your protein.

Melissa Rosen:

Okay. And because you mentioned it a couple of times, I'm just going to ask you to clarify. So supplements aren't regulated by the FDA. That's why you're talking about a third party source. So can you just one more time say what we're looking for?

Tamar R.:

So it almost looks like the kosher symbol, but it's a circle. It says USP or NSF. That means it's voluntarily tested by an outside unbiased source. There is a website where you could check the supplement you're taking and whether it's NSF or USP certified, so you can check that. It's just kind of basic, if they went that way already, it's a little more trustworthy. But as I said, the FDA only takes something off the market after something has happened, like with a lot of the weight loss supplements and people's livers were injured. So you just have to be very careful.

Melissa Rosen:

Thank you for that. I think that was an important point to get across. Listen, I want to thank you so much for sharing your expertise with us this evening. You answered so many questions, and there were many we didn't get to. So let me assure or reassure all of you that Tamar will be back. She does many things

with Sharsheret. Somebody just asked if we could post Tamar's website again, one more time, so if we could do that. Okay. There, it's right up there now. In the registration, we asked you to rate your level of awareness of food options that boost bone health.

Melissa Rosen:

Please take a moment to fill out a very brief evaluation survey that's linked in the chat box right now. That will help us with future programs. And if you have any additional questions, there's an option to ask them there. Again, of course, I want to thank Amgen and The CDC Cooperative Agreement, our sponsors for today's webinar, as well as the other two in the series. Please stay tuned for our third webinar in the series.

Melissa Rosen:

That one which Tamar alluded to is Bone Health and Fitness. And that's coming in May during osteoporosis awareness month. Somebody just asked about the video. We are actually in the follow-up with apologies to our caller, as well as all of you. At this moment there's no time, but we are going to attach a private link to it in our follow-up email. It's a really moving story. So if you have a chance to review it, take a look at it there, I think you'll get a lot out of it. A reminder, stay connected with us via social media, Facebook, Instagram, Twitter. We post so much information there, program updates too.

Melissa Rosen:

Please put the survey link in one more time. People have lost it. And fun ways to get involved with us. And please, of course, never forget that Sharsheret is there for you and your loved ones during cancer experiences. We provide emotional support, mental health counseling, and all of these other programs designed to help you navigate through a cancer experience. All are 100% individualized, 100% confidential, and 100% free. Our number and our email address is going in the box right now. Our social workers and our genetic counselor are available to each one of you. Thank you again for joining us. Thank you again to Tamar, and have a wonderful evening. Good night.

Tamar R.:

Thank you. And eat your spinach.

Melissa Rosen:

Good night.

Tamar R.:

Good night.