Breast Cancer Survivors: What You Need to Know About Nutrition and Exercise

National Teleconference Transcript September 10, 2014

Presented by:



This program is supported by the Cooperative Agreement DP11-1111 from the Centers for Disease Control and Prevention.

1 © 2014 Sharsheret, Inc. All rights reserved. The information contained herein is intended to provide broad understanding and knowledge of the topics presented and should not replace consultation with a health care professional.

I.	Introduction		
II.	Nutrition as a Breast Cancer Survivor		
III.	Exercise as a Breast Cancer Survivor		
IV. Question & Answer15			
V.	Conclusion		
VI.	Speakers' Biographies24		
VII.	VII. About Sharsheret25		
VIII	VIII. Disclaimer		

Elise: Good evening, everyone, and welcome to today's program. At this time, all participants are in a listen-only mode. Later, you will have the opportunity to ask questions during a Q&A session. You may register to ask a question at any time by pressing the "*" then "1" on your touch-tone phone, and you may withdraw yourself from the question queue at any time by pressing the "#" key. Please note this call is being recorded and I will be standing by should you need any assistance.

It is now my pleasure to turn the conference over to Shera Dubitsky. Please go ahead.

I. Introduction

Shera Dubitsky: Thank you, Elise, and good evening, everyone. My name is Shera Dubitsky and I am the director of Navigation and Support Services at Sharsheret. I want to welcome all of you to tonight's national teleconference, "Breast Cancer Survivors: What You Need to Know about Nutrition and Exercise".

> As we are two weeks away from celebrating Rosh Hashanah, I imagine that some of you have already begun thinking about your holiday menus, perhaps started perusing your cookbooks, and pulling out the tattered index cards with old family recipes. Matzah balls, fancy challahs, kugels, honey cakes, are most likely found on many Rosh Hashanah menus across the country.

> That being said, Sharsheret offers a healthy cookbook that is included in our Thriving Again survivorship kit, and I want to encourage you to go to our website at www.sharsheret.org to order your personalized kit, if you haven't already done so, and discover new, healthy recipes just in time for the new year.

> After the multiple holiday meals, you may want to work off the calories by joining Team Sharsheret for the New York City "Making Strides Against Breast Cancer" walk on Sunday, October 19th. It promises to be a fun and meaningful way to engage in a healthy activity with friends and family, and you can register by going to Sharsheret's website.

I also want to announce that we have one slot left for the sold-out New York City Marathon on November 2nd. For more information on that, you can visit our website and e-mail athletes@sharsheret.org. The deadline for registration is this Friday, so if you're interested, certainly get in touch with us by Friday. In addition to focusing on the holiday feast, Rosh Hashanah is also a time for contemplation and anticipation of the upcoming year. As breast cancer survivors, many of you may be using this time to reflect on your cancer journeys, and looking to the future to establish good, healthy living and well-being. The goal of tonight's teleconference is to address topics that focus on healthy living: meal recommendations and preparation and fitness for breast cancer survivors.

Our first speaker tonight is Cara Anselmo. Cara is an outpatient dietitian at the Evelyn H. Lauder Breast Cancer Center of Memorial Sloan-Kettering Center in New York City. Her special interests include oncology and nutrition, plant-based diets, and weight management. Cara's also a certified yoga instructor and has taught in New York City since 2007.

Cara earned her Masters of Science in clinical nutrition from New York University in 2007, and completed her dietetic internship at New York University Medical Center. She has a Bachelor of Arts in English from Brown University, and we are very fortunate to have Cara join us this evening.

Without further ado, Cara, the floor is yours.

II. Nutrition as a Breast Cancer Survivor

Cara Anselmo: Thank you so much. Good evening, everyone.

This part of the talk will cover best practices for eating well during breast cancer treatment and throughout survivorship. Not only does your diet affect your health and how you feel during treatment, including chemotherapy and endocrine therapy, it also sets the stage for wellness later on. With so much media attention on nutrition, and so much misleading and often scary information out there, I hope this talk will offer some clarity and help to guide you towards your own best health.

Let's begin by outlining the goals of a healthful diet during and after breast cancer treatment. What do you want to gain by eating well?

First, you want to maintain a sense of wellness both physically and mentally. Disease-free years aren't the same if you're unhappy in your quality of life.

Another long-term goal is promoting a healthy body weight. We know that obesity is associated with less-favorable outcomes in

women with a history of breast cancer, and may contribute to higher risk for disease recurrence and death. Overweight and obesity also increase the risk for diseases like type 2 diabetes, heart disease, and other kinds of cancer. If you're currently at a healthy weight, it's best to stay at or near that weight. If you're overweight or obese, it may be beneficial to lose weight. We'll talk about this more later in the call.

Additional goals during chemotherapy and radiation might be decreasing possible side effects such as nausea, taste changes, and fatigue, and optimizing treatment efficacy by keeping your immune system strong and avoiding drug-nutrient interaction.

I'm often asked by women, "What should I eat, and what should I avoid? Just give me a list." While it would be nice and simple if I could provide two distinct lists of food, "eat this and don't eat that", good nutrition isn't so black-and-white. It's important to look at the big picture and understand concepts of variety and moderation.

A healthful diet for most people is one that's mostly plant-based and consists of whole foods with appropriate total calories and protein, a variety of whole vegetables, fruits, grains, and healthy snacks. Added sugar and alcohol should be limited and processed meats avoided. Most of all, the best diet is one that's sustainable over time. You want a lifestyle rather than to be "on a diet".

When I say "whole foods", I'm not talking about the store, I'm talking about eating a whole baked potato with the skin on, not potato chips made from potato flakes and gums and fillers. I'm talking about eating a piece of fruit, and not taking a supplement powder that contains some fruit extract. When I say "plant based", I don't mean you have to take out every animal product, but do be sure that much of your plate is filled with good plant food, like vegetables, at most of your meals.

Some specific questions tend to come up when I talk with women about nutrition and breast cancer. One of these is whether it's OK to eat soy foods and phytoestrogenic food. There's a bunch of evidence that for women with a history of breast cancer, eating whole soy foods like tofu, edamame, or miso, and eating flax, is safe and possibly offers some health benefits in the context of a balanced diet. As with any type of food, it's important not to overdo it. Soy foods every day at breakfast, lunch, and dinner may well be too much, but a few servings a week should be absolutely fine. You should not take soy isoflavone pills, powders, or supplements. These concentrated forms may not be safe or beneficial, but there are no whole foods that need to be avoided entirely due to potential phytoestrogenic or plant estrogen qualities.

Another question I get is about organic foods. While there isn't enough research to show eating organic foods reduces cancer or other disease risk, there's really also no downside to choosing organics, except for maybe an increased cost in some cases, and the fact that it can be harder to find.

An organization called the Environmental Working Group or EWG publishes a list of which fruits and vegetables tend to have higher pesticide and other residues, and it's worth reviewing if you're concerned about this. Check out their website at EWG.org. Also, keep in mind that organic animal products, by law, can contain no added growth hormones or antibiotics, and that all organic products must be free of GMO, or genetically-modified organisms. If these are concerns that you have, choosing organic may be worth it for you.

Sugar and cancer is another hot topic, and there's many reasons to limit added sugar. Excess sugar means excess calories, which may lead to weight gain. Too much sugar and refined carbs can also contribute to chronic high blood sugar and insulin resistance, precursors to diabetes that have been linked with tumor growth. However, eating some sugar, especially in foods that naturally contain it, like fresh fruit, is not a problem.

Do look for hidden sources of sugar, things like bottled salad dressing to fruit yogurts to breakfast cereals and pastries. As is the case with so many foods and nutrients, the devil here is in the dose. I wouldn't recommend drinking sweetened soda or other sweetened beverages every single day, or eating candy instead of lunch, or eating too much of any given food. But one cookie with lunch or an occasional shared dessert won't necessarily feed cancer growth. Just keep portions practical and be honest with yourself.

I mentioned limiting alcohol intake earlier as part of an overall healthful diet, and this is even more important for women who are at high risk for breast cancer or have a history of the disease. Women who drink more than one drink per day, over time, have an increased risk for primary diagnosis of breast cancer, compared with women who drink less or not at all. The evidence on alcohol and recurrence risk is complicated. It's hard to suggest a certain amount of alcohol intake that's safe, but that doesn't mean you can never enjoy a glass of wine. Alcohol consumption is one area where less is definitely more, but if an occasional drink is important to your quality of life and your enjoyment of meals and your social time, you might prefer to embrace moderation versus elimination.

Now, many of you who are listening have probably finished with active chemotherapy and radiation treatments, but for those who are in the process or are just starting, I wanted to highlight a few special points.

During chemotherapy, be mindful of food safety. Since your body may be immunocompromised, I would suggest avoiding raw or under-cooked meat, fish, poultry, or eggs, avoiding sushi, avoiding unpasteurized foods. Wash your hands thoroughly before you prepare food and eat.

Be sure to drink plenty of water during chemotherapy. Ideally, about two liters a day. This is the best way to clear the drugs from your system and prevent against bladder infections, which are more likely with certain agents. Also, some chemotherapy drugs will cause constipation, others diarrhea, and this is another reason it's really important to hydrate well. If water tastes funny or if it's hard to drink enough of it because of nausea or taste changes or other side effects, try adding some sliced cucumber or some lemon. Ginger or peppermint tea, either hot or iced, can also taste refreshing and can be soothing on the stomach.

Side effects really vary from person to person and depending on the specific treatment, but generally, it's usually best to choose small portions of familiar foods at first. If you have mouth sores or reflux, avoid very spicy, acidic, or greasy foods, which can worsen these symptoms. If you have nausea, try to avoid food odors. Keep yourself cool, sip on liquids a little at a time and try small portions of foods that are dry, salty, or bland, but try not to eat too many simple carbohydrates like white bread, pretzels, chips, and cakes.

It's best to get your nutrients from real whole foods, rather than dietary supplement pills, especially during chemotherapy and radiation therapy. Too much of certain vitamins and minerals may interfere with the oxidative effects of treatment, and certain botanicals can interact with treatment drugs. In some cases, your doctor or nutritionist may advise taking a supplement such as vitamin D or iron, if you happen to be deficient, but always check with them first before taking any new supplement. Don't ever worry about getting too much of a given nutrient from practical portions of whole foods.

I don't recommend juicing, because you can actually get too much of certain nutrients, not to mention too much sugar, from juicing. A bowl of fresh whole blueberries or a plate of sautéed spinach and garlic is perfectly fine.

During chemotherapy and radiation, not to mention for a while afterward, fatigue may be a significant side effect. As much as possible, plan in advance, keep it simple, and recruit help from friends and family. Have staples on hand like canned beans, frozen vegetables and fruits, individual plain yogurts, nut butters, diet spices and herbs. Then you can buy a bunch of fresh vegetables, fresh fruit, or other fresh foods. You can get these items once or twice a week and work with what you already have to make a nice meal.

These days, there's also some great-tasting and pretty healthful frozen meals available. You can check out Amy's organic brand, for instance, or Hilary's brand veggie burgers. Also, take advantage of times when you have the most energy and you feel your best. That's when to go ahead and prepare a big green salad or make a vegetable frittata, and make extra for the next day's lunch so there's always something quick and helpful on hand.

Some women find they gain weight during chemotherapy without wanting to. While chemotherapy drugs themselves won't necessarily make you gain, factors like decreased physical activity, stress, steroid drugs, comfort eating, and lack of sleep can certainly cause you to eat more and gain weight. If you find this is the case, don't beat yourself up, but do take practical steps to take back control.

One place to start is with a food diary. Write down everything you eat and drink with as much detail as possible. Include the time of day, who you're with, if anyone, and how you were feeling. This is a self-monitoring tool. It's not meant to shame or to judge, but just to foster individual accountability, and to identify possible patterns and triggers for less-than-ideal food choices.

Pay careful attention to portions. Often times women are eating healthful foods but just too much of them. Always start with smaller portions and take your time to eat. It takes the brain about 30 minutes to get signals from the stomach that it's full. Only go back for more food if you still feel physically hungry.

Let your friends and family know, very specifically, how they can help with your weight-management efforts. If you don't want them to bring you cookies, say so. Ask them to bring some fresh fruit or send you some interesting podcasts instead of food that's not part of your eating plan. A lot of times people are happy for the suggestions and happy to really be helping you.

Make a list of activities that help you feel less stressed and that don't involve food. These might include taking your dog for a walk, doing a crossword puzzle, taking a cold shower, reading a novel, calling a friend.

As for exercise, some is better than none, and the benefits are twofold. Movement expends calories to help with weight management, but exercise also improves your mood and your awareness of natural appetite and satiety signals. It increases mindfulness and boosts energy, all of which help you to eat smart. Carol, of course, will be speaking much more about exercise later.

Remember, this is a process. Just because you gained a couple of pounds doesn't mean you should throw in the towel and give yourself mental permission to keep gaining. Just because you overeat on one occasion, doesn't mean you're doomed to always overeat. Remember, you can hit the restart button as many times as you need to.

It's not entirely clear why overweight and obesity are linked with poorer outcomes with regard to breast cancer. There's probably multiple reasons.

We do know that fat cells, or adipocytes, help to make and store hormones, including estrogen. Therefore, excess fat tissue may increase breast cancer risk by increasing the body's exposure to circulating estrogen. Research suggests this is more of a concern in postmenopausal women. While their ovaries stop making estrogen, excess fat tissue remains a source of exposure over time.

Fat tissue also produces hormones called adipokines, which may stimulate or inhibit cell growth. For example, leptin, which is more abundant in obese people, seems to promote cell proliferation. Adiponectin, which is less abundant in obese people, may have anti-proliferative effects. Carrying excess fat, particularly around the abdomen, called visceral fat, is associated with metabolic and hormonal conditions that may be related to cancer development. For example, obese people often have increased levels of insulin and insulin-like growth factor 1 in their blood. This is the condition known as hyperinsulinemia or insulin resistance, and it may promote some types of tumor development. Fat cells may also have direct and indirect effects on other tumor-growth regulators, including ones called mTOR and AMP-activated protein kinase. Also, chronic inflammation, which is linked with obesity, may help promote tumor growth.

Aside from possibly increasing recurrence risk, carrying excess body fat also increases the likelihood of breast cancer-related conditions like lymphedema, and side effects like hot flashes and joint pain.

So all up, there are lots of reasons to avoid weight gain and to take steps to reduce your weight if you're carrying too much. Take it gradual, one day at a time, and aim to keep it off over time.

Good nutrition is not always easy, and as with facing breast cancer, there may be days that are painful, that are very challenging. But the more that you practice, the more that you get to know your own self, and the more it becomes a habit, the easier it actually gets and the greater the rewards.

Don't be afraid to explore, ask questions, and if you have any questions tonight, later on, I am happy to answer them. Thank you.

Shera Dubitsky: Cara, thank you. You did a very good job in 15 minutes touching on many of the questions that we certainly have heard here at Sharsheret, particularly around the phytoestrogens.

I particularly appreciated your discussion on advanced planning. I love the idea of turning to your support network for support. I think my favorite thing was about the restart button. Sometimes that restart button may need to be pressed several times during the day, but I love the notion of being able to do that.

Thank you very much.

Cara Anselmo: Thank you.

III. Exercise as a Breast Cancer Survivor

Shera Dubitsky: I'm privileged now to introduce our next speaker, Carol Michaels. Carol is an exercise specialist, consultant, and author, with over 18 years of experience as a fitness professional. She is the creator of Recovery Fitness, a safe and effective exercise program for people with osteoporosis and cancer. In fact, her fitness DVD is available in Sharsheret's Thriving Again survivorship kit. She has been recognized as an innovative fitness leader in promoting health and well-being.

> Carol's awards include the American Council on Exercise in Life Fitness, Trainer To Watch 2011, Personal Fitness Professional, and Trainer of the Year 2012. She was also a finalist for the IDEA Fitness 2014 Trainer of the Year.

She is a sought-after speaker, instructor, and workshop leader for wellness programs in hospitals, work sites, and community settings. Her book, "Exercises for Cancer Survivors", is also a resource for people undergoing surgery or cancer treatments.

We are grateful to have Carol with us tonight. Carol, the floor is yours.

Carol Michaels: Thank you so much. Good evening, everybody.

I'm going to talk about exercise and why it's so important to incorporate exercise into your day during and after treatment for cancer. Exercise might be the last thing on your mind after a cancer diagnosis, but a good fitness program will help you build up strength, increase flexibility, improve your mood, and help your recovery. Even during chemotherapy, studies have indicated that exercise may increase fitness and energy levels, and help you better tolerate cancer treatments.

It really should be part of your treatment plan, just like good nutrition, because evidence is now suggesting that exercise can decrease the risk of recurrence. I find that to be very, very important and powerful information.

Exercise also decreases body fat which can help lower estrogen levels, and as Cara touched on before, overweight women have a higher risk of recurrence compared to women who maintain a healthy weight. Exercise improves the immune system, decreases insulin level, reduces pain and fatigue from cancer treatments, and it goes on and on. Improves sleep, reduces stress ... There's really

11

a lot of reasons to motivate yourself to add exercise to your lifestyle.

When some people hear the word "exercise", they might immediately think about a difficult gym class or a boot camp. But exercises that are in a good cancer exercise program are gentle, safe, and effective. They don't have to be high-intensity. Some people will need to begin to exercise under supervision. Everyone is different. Others will be able to exercise independently. The type and scope of cancer and overall medical condition, and your fitness level, determines whether or not a supervised program is needed.

So when can you really start to begin an exercise program after having cancer surgery and treatment? Well, I always recommend that you just start with relaxation breathing immediately after surgery. It really allows you to focus all your energy on healing. Use abdominal and relaxation breathing, because this type of breathing is important to stimulate the lymph flow and lymphatic drainage. The breathing acts as a lymphatic system pump, it allows the oxygen to get to the tissues, and reduces stress.

Start doing some stretching exercises as soon as you get clearance from your doctor. It's important to talk to your doctor before you start to exercise. This way, you can determine what program is right for you. A stretching program will restore mobility in the chest and the back, and will allow for freer movement of the lungs and diaphragm.

I do recommend, if possible, to have a full fitness assessment prior to surgery, because this way, after surgery, you have a basis for comparison. Posture is a very important component of the evaluation before and after surgery, because that is something that is typically affected by, particularly, breast cancer surgery.

For exercise progression, many variables determine the exercises that are effective and safe for your particular situation. Every day is different and has different challenges, so you really need to be very adaptable and loose about it, be able to modify your exercises to fit your needs at a specific, given time.

Your pain and fatigue levels change from day to day, even hour to hour. Sometimes you wake up feeling fine but you might have increased fatigue as the day progresses. A good tip is to track your energy levels throughout the day to determine the best time to schedule your exercise sessions. If you have more energy in the afternoon, that's when you should exercise. Exercise when energy levels are high.

Always use common sense and listen to your body. You don't have to ever follow a really strict-set protocol or schedule. Your routine must be customized due to the numerous physical and psychological side effects that you might be experiencing.

Start moving as soon as possible after surgery, even if it's only walking indoors. This'll help you to regain your strength. If you were inactive prior to surgery, just take some very small, short walks, increase the distance walked each time. You can increase the frequency and the distance of the walk. Just build up strength slowly. Make sure never to overdo it. Even just 15 minutes a day is a good start and can begin to improve your energy and mood.

Incorporate aerobic activity into your fitness plan. Aerobic activity is just any activity that increases your heart and breathing rate. A good idea is, try to find something that you really like to do, and try to do it very regularly. Aerobic activity is an important component of a fitness plan. Activities like walking, hiking, and dancing are aerobic activities. Find something that you like to do; you're more likely to do it on a regular basis.

You should begin light stretching exercises as soon as you get clearance from the doctor, just because lack of flexibility, poor range of motion, is a very, very common side effect. It's a good idea to start off learning the appropriate stretches and continue to do them long after surgery and treatments are finished, especially after radiation. That can cause some additional tightening. Stretching should be done daily, and sometimes a few times a day, soon after surgery and radiation treatments.

You need to stretch in order to maintain your flexibility, and if you didn't start right after treatment, it's never too late. Just start right now. Scar tissue will continue to form and must be stretched regularly to avoid adhesion. Again, surgery and radiation can result in muscle tightness, muscle tightness can cause poor posture, and poor posture is one of the reasons some survivors have aches and pains, and could lead to orthopedic issues. So really trying to get back to your good posture is an important goal.

Some of the chemotherapies can affect balance and cause neuropathy, so begin with stretches to loosen up the arms and the legs. Simple exercises, like walking on a straight line, like on a tight rope, and calf raises, can help improve balance. If you did have

13

some neuropathy due to the chemotherapy, you want to make sure to do safe exercises. For example, it might be preferable to use a stationary bicycle as opposed to a treadmill, and if you do use a treadmill, make sure to hold on. All different balance exercises would be recommended.

Strength training is a very important component of a good exercise plan. Strength training increases muscle mass. Strength training can be performed with weights, bands, machines, or your own body weight. The important thing to know is start slowly and progress slowly.

Another reason to strength train is that chemotherapy can cause weight gain and can change the muscle-to-fat ratio. Strength training improves the muscle-to-fat ratio. Sometimes people, after chemotherapy, will say, "Well, I might weigh the same or a little more, but my body just looks very different than it used to," and by adding strength training, can rebuild the muscle that you've lost.

We do need to gain muscle which can decrease during treatments. We need to strengthen bones, which is accomplished through strength training. Having more muscle will increase your metabolism. Because of this sarcopenia, the change of the ratio between fat and muscle, if you add strength training two to three times a week, it can increase your muscle mass and decrease fat. As I mentioned earlier, it can also decrease the risk of osteoporosis, which is a decrease in bone density, which can be an issue after chemotherapy.

Strength training will not only increase your muscle mass, it will help strengthen bones, you'll get a feeling of accomplishment, it will increase endurance.

Reconstructive surgeries, though, do need special strength training exercise programs, and I can go into those a little bit later, so I'll leave it right there.

Shera Dubitsky: Great, Carol, thank you very much. I think you're right, that people associate exercise with the whole notion of a boot camp or a highintensity regimen, so I like the fact that you really are emphasizing that people need to start off wherever their baseline is and build up from there. Thank you very much for making that point particularly.

> We will now open up for questions and answers. We're going to ask that you keep your questions broad so that everyone can benefit

from the discussion. I'm going to ask Elise to come back on and give instructions for question and answers.

IV. Question and Answer

- Elise: Certainly. At this time, if you would like to ask a question, please press "*" then "1" on your touch-tone phone. You may withdraw yourself from the question queue at any time by pressing the "#" key. Once again, "*" then "1" if you would like to ask a question.
- Shera Dubitsky: Great. Thank you, Elise.

Carol, I'm going to go to you and maybe pick up where you just left off, and that is, should exercise regimens change based on what surgery and reconstruction a woman had, and also, are there exercises that raise the risk of lymphedema or perhaps exacerbate lymphedema?

Carol Michaels: It really does depend on the type of reconstruction that you had. The type of reconstruction will determine your specific exercise plan.

For example, if somebody has had a TRAM flap operation, it's really, really important to do exercises to strengthen the oblique muscles, those are the muscles that run along the side of the body, because the abdominal muscle, the rectus abdominis, is no longer where it was. Some of the potential side effects from a TRAM flap surgery is posture. With diminished support of the abdominal wall, it might be difficult to stand erect. Again, posture exercises become very, very important.

You might also suffer from abdominal or lower back weakness because of the change of the abdominal muscle. The goal is to regain range of motion and then strengthen. In all the surgeries, though, upper-body flexibility can be compromised, in a TRAM flap, the lower body, also, due to the scar from the abdominal part of the operation.

You might also find tightness in the hip flexors due to leaning forward as a result of the tightness from the abdominal surgery. Balance can be affected because of a decrease in core strength. Core strength really goes hand-in-hand with good balance, so it's important to incorporate good balance exercises into your exercise plan. If anybody has had a LATflap surgery, where the latissimus dorsi muscle in the upper back is rotated to the chest, it can possibly disturb the surrounding tissue. The shoulder and back might become weaker, and some women do have, again, difficulty maintaining proper posture. So after you get your posture where it needs to be by stretching the chest muscles and strengthening the back and shoulder muscles, you can then add very specific exercises, like the serratus reach, the chest fly, reverse fly, and upper back strengthening exercises using a band or weight.

Then the other part of your question was about lymphedema?

Shera Dubitsky: Yes.

Carol Michaels: OK. Lymphedema is swelling of a body part, and it's a disorder of the lymphatic system. Too much lymph fluid can accumulate in an area of a body that has been damaged. When lymph nodes are removed or radiated, there can be damage to the lymphatic system.

Studies suggest that regular exercise, even strength training, may decrease the risk of lymphedema or diminish the symptoms of lymphedema. That was a very important study that was done in '09. So exercise is a very important part of lymphedema control. It helps improve venous drainage. I always like to have the person start by elevating the affected area above heart level. Strength training not only is safe, it also might help.

It is important to proceed slowly and carefully under the guidance of a physical therapist or a cancer exercise specialist. The technique is very important, and when you have lymphedema or are at risk of lymphedema, you must start out very slowly. By that, I mean you might have been doing some weight lifting prior to your diagnosis, maybe you were using 10 pounds ... you would have to go back to a very light weight, one or two pounds, and week by week, just slowly add weight. If you go on vacation, you start right from the beginning. Just don't go right back to a heavy weight.

The exercise will help stimulate lymph flow and lymphatic drainage. It can also act as a pump, a lymphatic-system pump, moving sluggish lymph fluid around the body. And again, it reduces stress. So very important for lymphedema.

Shera Dubitsky: Great, thank you very much.

Cara, we're getting some questions about phytoestrogens and certain treatments. For example, Tamoxifen ... we're getting

questions about it in terms of aromatase inhibitors. Any comment that you'd like to add to the discussion?

Cara Anselmo: Sure. I would say that my recommendations about limiting soy foods would stand, but there's no need to eliminate them. Choosing practical portions, as I said, with any foods, is key. So a woman who might want to have tofu once a week for dinner and soy milk in her cereal a couple of times a week, that's never a concern, whether you're on Tamoxifen or one of the aromatase inhibitors, such as Femara or Arimidex or Aromasin. That's fine.

> It's really the concentrated soy supplements, the soy protein powders, the soy isoflavone pills, that become concerning. That's where we see doses that are much larger and that can have some questionable effects.

So same thing, whether you're taking Tamoxifen, an aromatase inhibitor, or whether you're not taking any medications at all, limit the foods to practical portions, but there's no need to avoid any whole foods.

- Shera Dubitsky: OK. Also, I guess connected to particularly the hormonal interventions have you heard that Tamoxifen or, again, the aromatase inhibitors may cause weight gain?
- Cara Anselmo: Yes. The same way that every individual responds differently to a medication, we do see that some women have more weight gain with these types of drugs. Not necessarily aromatase inhibitors, more so with Tamoxifen. But we also see that there are women who don't have any weight gain and who actually lose some weight.

The average weight gain, based on the research, is about two to four pounds with Tamoxifen. There is no actual weight gain in the literature documented with aromatase inhibitors.

One of the things that a lot of times contributes to weight gain is lifestyle changes. Lack of physical activity, decreased exercise. There's lots of other things, in addition to the drugs, that might be going on at the same time that can contribute to that weight gain.

Shera Dubitsky: OK, thank you.

Carol, somebody wanted you to say a little bit more about the fitness assessment. Who performs that? Where would you go for that?

Carol Michaels:	You could go for a fitness assessment to a physical therapist, knowledgeable about cancer, oncology physical therapist, or you could go to a cancer exercise specialist.
	I find that when I actually have the opportunity of working with someone prior to their surgery, we take the measurements, a flexion, the ability to move the arm up towards the ear, extension, the ability to move it behind you, induction, and rotation, and start stretching and strengthening before the surgery - we've had very good luck in having a nice smooth recovery afterwards.
	Just as importantly, we know where the person started, so we do have something to compare it to. Because some people might come in with orthopedic issues prior to the surgery, not really even ever had a good range of motion.
	So a cancer exercise specialist or physical therapist would be the person to do this.
Shera Dubitsky:	I'm assuming that would also apply for people who are post- surgery, as well, that they can go for this kind of an assessment?
Carol Michaels:	That's correct, yes.
Shera Dubitsky:	OK.
	Cara, you had mentioned that you didn't recommend juicing. The question was about juicing vegetables, such as kale and beets. Any thoughts about that?
Cara Anselmo:	If someone's receiving active chemotherapy or radiation therapy, then I would suggest limiting juicing anything, whether it's vegetables or fruit, to no more than, at most, four to six ounces per day, and getting most of the nutrients from the whole foods.
	Because again, it is possible to get too much of certain antioxidants, too much of certain micronutrients, and that can interfere with the pro-oxidative effects of the treatment. In other words, we don't want to allow cancer cell growth in that setting of trying to halt the growth of the rapidly-dividing cells. So about four to six ounces, I would not be concerned.
	As far as someone who's not getting active chemo or radiation therapy, I still wouldn't suggest juicing as the best way to get vegetables and fruits.

One reason is, when you're juicing vegetable, you don't get any of the fiber. If you make a smoothie, then yes, you do maintain the fiber, but when you're juicing, you really eliminate a lot of that, and that's one of the greatest benefits of vegetables and fruits. You're drawing that away and that's never a good idea.

Another potential concern with juicing is that, even with vegetables juicing, it can add up and it can add calories. If someone's trying to lose weight, I always encourage eating the food rather than juicing. Even though we tend to think of these things as low-calorie, a lot of vegetables, particularly things like beets, that's where we get sugar from, and starchier vegetables actually do have a lot of sugar when they're concentrated and then they're put into a juice form.

Shera Dubitsky: Great, thank you.

OK, Carol, what are your suggestions as far as balance between cardio-based exercise and strength training, and yoga/Pilates, for optimal health and weight management or weight loss?

Carol Michaels: Well, the buzzwords are "avoid inactivity". The more you can do out of all the things you mentioned, the better. You can keep very busy being active.

It is very important to incorporate Pilates into an exercise routine because of the deep breathing used with each movement. You can also just do a few repetitions and use very, very little weight.

Yoga is another excellent form of exercise, very good for stress reduction. But you have to be very careful, because some of the poses can causes lymphedema flare-ups. If you are taking yoga classes, make sure that your instructor is very familiar and trained properly in yoga for people with or at risk for lymphedema. You should not do downward-facing dog for an extended period of time and some other positions, and I would avoid hot yoga.

As for aerobic exercise, it is essential for good health, so you really do need to walk, at least walk on a regular basis. I like to say try every day, if you get five days, a weekend, that's good, too. Again, you start 15 minutes and try to get up to 30 to 45 minutes. Aerobic exercise needs to be done regularly.

Strength training needs to be done two to three times a week, because this way, it will help you rebuild your muscles, strengthen your bones, and will have a good effect on helping you keep your weight under control. During all these exercises, I also do recommend using relaxation breathing, because there's such an emotional toll that cancer survivors face in addition to the physical one. Proper breathing techniques and stretching can really improve the psychological recovery and help you maintain good posture, which can be affected by breast cancer surgery.

Shera Dubitsky: Thank you.

Cara, we have somebody on the line who is a vegetarian, and she is asking about some of the "fake" meat products. Specifically, she's asking about soy with that. Is that something she should be concerned about?

Cara Anselmo: That's an excellent question. I actually follow a vegetarian diet as well, and there are so many more products out there than there ever were before, meat replacements that use soy protein.

If you are having those products occasionally, if you like to have a fake meat veggie burger or the fake chicken nuggets maybe once every couple of weeks, not a big deal. But I wouldn't make them a mainstay of your diet.

Part of the reason is because of the unknown effects of high doses of soy, and this is a much more concentrated form than what you would get from tofu or tempeh or edamame or miso.

The other reason I'd recommend limiting those is just because they don't tend to be the most healthful options overall. A lot of times they have added sodium, they have added preservatives and sugar, so they tend to not be the healthiest options, even regardless of the soy question.

One suggestion that I would have is ... there are lots of products such as, again, veggie burgers, I mentioned a couple of brands earlier, that don't have soy protein that are made just with vegetables and with grains. If you're looking for a meat replacement, look for the frozen burgers or the frozen meat replacements that don't have soy protein as the first ingredient, but that might have ingredients like millet and quinoa and greens and beans and legumes. Those tend to be the most healthful options.

Shera Dubitsky: Thank you.

I guess this question can really be for both you, Cara and Carol. We have some participants tonight who are living with metastatic breast cancer. The question is, do you have any additional information or certain thoughts that would be unique to these women?

Cara, I guess we'll start with you.

- Cara Anselmo: With me?
- Shera Dubitsky: Cara, yes.

Cara Anselmo: Yeah. (laughs) OK. Our names are so similar.

Shera Dubitsky: I know. (laughter)

Cara Anselmo: In the metastatic setting, a lot of the recommendations that I've been making would still apply.

There are going to be some differences. Sometimes women are on medications for longer periods, whether it's chemotherapy or other types of treatments, and that can affect nutritional status over time. So do be sure that if you are taking any long-term chemotherapy or other medications, to talk with your doctor or talk with your nutritionist about anything that might be especially important for you to include or not include in your diet.

Another thing that I would mention in the metastatic setting is that if someone is struggling to keep weight on ... I've been focusing lots on taking weight off, but that is, of course, also a concern in many cases. In that case, there's going to be a different set of guidelines, there's going to be different considerations.

That's where really maximizing nutrients in foods is going to be important for someone who feels like they are struggling to maintain a healthy weight, and they keep losing because of side effects of treatment or because of the disease process. Think about adding things like high-calorie smoothies, adding avocados and nut butters, and foods that are going to feed you well nutritionally, and that do have lots of calories and healthy fat, but that don't have a whole lot of volume, so you can include them without feeling very full.

Shera Dubitsky: Thank you.

Carol, do you have anything you want to add to that?

Carol Michaels: As for the exercise component, it's very, very similar to someone who does not have metastatic cancer.

One thing that I find very helpful when I work with groups of people in that situation, working with an exercise buddy or somebody who is in a similar situation to you is very motivating and it becomes a very social situation, and would help you to keep up with your exercise program.

Of course, you just might have to check in with your medical professional a little more regularly before continuing to exercise.

But more or less, everything that I said earlier would apply to metastatic cancer.

Shera Dubitsky: OK, thank you.

Cara, we have a question here about milk products and dairy products. Is that a concern for women in terms of estrogen and cancer?

Cara Anselmo: That's also a great question. There is no research that demonstrates a link between dairy intake and breast cancer, but I completely understand that concern, especially given industrialized agriculture practices and the use of added hormones in the food supply.

> My suggestion would be, rather than throwing the baby out with the bath water and saying, "I'm never going to eat dairy," look for organic dairy or look for dairy that specifically says "no added hormones," "no added antibiotics." You can look for dairy that's from grass-fed cows or goats.

A lot of times, local brands, smaller brands, don't have organic certification, but they may use those practices. Often times, by going to the manufacturer's website and just asking some more questions, you can find out more about the practices they use.

Shera Dubitsky: OK.

Carol, the last question for tonight comes from a woman who is asking about post-mastectomy. She had reconstruction with implants under her pec muscles, and she wants to know if there are exercises to avoid. Carol Michaels: Yes. When you have implant reconstruction, at first you would really take it easy on the type of exercises that you do with the chest muscles. You really do want to have some caution with the pectorals. That would mean you would not immediately start going into a full-style military push-up.

But there are ways of modifying so you can strengthen the pectorals without going into that type of position. For example, a wall push-up, where you are standing up several feet away from the wall, and doing a push-up against the wall in a similar motion that you would do if you were on the floor.

In terms of implant reconstruction, again, inactivity and protective posturing ... people have the tendency of curling the shoulders forward to protect the area that's so tight, and this could lead to a frozen shoulder, which we always try to avoid. So the most important thing is start to stretch the entire upper body, start strengthening.

But everything, for the first few months, should be done in a modified form. Do not go right into intense, heavy lifting. Same rules would apply for implant reconstruction. Start with very light weights and slowly increase the weight.

V. Conclusion

Shera Dubitsky: Great. I think that's a good place for us to stop, because I think it really does summarize the evening about knowing yourselves and remembering modification, and really just taking things slowly and figuring out what really works best for each of you.

I want to thank all of you and our speakers for that enriching question and answer discussion. You will be receiving an evaluation in the e-mail, so please take the time to complete the survey. Your feedback is very important to us, and we are committed to staying relevant by enhancing our programs to reflect the growing and changing needs of the women and families of our Sharsheret community. Sharsheret's expertise is in young women and Jewish families, but our 12 national programs are open to all men and women, regardless of background.

I'd like to thank, again, our speakers for sharing their expertise with us tonight, and to recognize that our program was made possible with support from cooperative agreement DP11-111 from the Centers for Disease Control and Prevention. We would like to express our gratitude to the CDC for recognizing and supporting the needs of breast cancer survivors.

Finally, I'd like to remind you to visit Sharsheret's website at www.sharsheret.org, or call us at (866) 474-2774, to order your personalized survivorship kit that includes a healthy cookbook, and to register for the "Making Strides Against Breast Cancer" New York City walk on October 19th.

Most importantly, we want to wish all of you a very happy, healthy, and sweet new year. Good night.

VI. Speakers' Biographies

Shera Dubitsky, M.Ed., MA, is the Director of Clinical Support at Sharsheret. She is a graduate of Columbia University and a doctoral candidate of Adelphi University Institute of Advanced Psychological Studies. Shera supports and connects newly diagnosed young women and those at high risk of developing breast cancer or ovarian cancer with suitable peer supporters, advances and develops programs addressing the unique needs of the young women and families of Sharsheret, counsels individual members of the Embrace program, and facilitates its monthly support group teleconferences.

Cara Anselmo, MS, RDN, CDN, is a nutritionist in New York, NY. She is an outpatient dietician at the Evelyn H. Lauder Breast Center of Memorial Sloan-Kettering Cancer Center. Her special interests include oncology nutrition, plant-based diets, and weight management. Cara is also a certified yoga instructor and has taught in New York City since 2007. Cara earned her Master of Science in clinical nutrition from New York University in 2007, and completed her Dietetic Internship at New York University Medical Center. She has a Bachelor of Arts in English from Brown University.

Carol Michaels, MBA, ACSM, ACE, is an Exercise Specialist, consultant, and author with over 18 years of experience as a fitness professional. She is the creator of Recovery Fitness®, a safe and effective exercise program for people with osteoporosis and cancer. She has been recognized as an innovative fitness leader in promoting health and well-being. Carol's awards include The American Council on Exercise and Life Fitness, "Trainer to Watch 2011", Personal Fitness Professional "Trainer of the Year 2012", and a finalist for IDEA Fitness "2014 Trainer of the Year". She is a sought after speaker, instructor, and workshop leader for wellness programs in hospitals, worksites, and community settings. Carol, a graduate of Wharton School, University of Pennsylvania has appeared on television, published articles and produced exercise DVDs. Her book, *Exercises for Cancer Survivors*, is a resource for people undergoing surgery or cancer treatments.

VII. About Sharsheret

Sharsheret, Hebrew for "chain", is a national not-for-profit organization supporting young women and their families, of all Jewish backgrounds, facing breast cancer. Our mission is to offer a community of support to women diagnosed with breast cancer or at increased genetic risk, by fostering culturally-relevant individualized connections with networks of peers, health professionals, and related resources.

Since Sharsheret's founding in 2001, we have responded to more than 30,000 breast cancer inquiries, involved more than 3,000 peer supporters, and presented over 250 educational programs nationwide. Sharsheret supports young Jewish women and families facing breast cancer at every stage—before, during, and after diagnosis. We help women and families connect to our community in the way that feels most comfortable, taking into consideration their stage of life, diagnosis, or treatment, as well as their connection to Judaism. We also provide educational resources, offer specialized support to those facing ovarian cancer or at high risk of developing cancer, and create programs for women and families to improve their quality of life. All Sharsheret's programs are open to all women and men.

Sharsheret offers the following national programs:

The Link Program

- *Peer Support Network,* connecting women newly diagnosed or at high risk of developing breast cancer one-on-one with others who share similar diagnoses and experiences
- *EmbraceTM*, supporting women living with advanced breast cancer
- Genetics for Life®, addressing hereditary breast and ovarian cancer
- *Thriving Again®*, providing individualized support, education, and survivorship plans for young breast cancer survivors
- Busy Box®, for young parents facing breast cancer
- Best Face Forward®, addressing the cosmetic side effects of treatment
- *Family Focus®*, providing resources and support for caregivers and family members
- *Ovarian Cancer Program*, tailored resources and support for young Jewish women and families facing ovarian cancer
- Sharsheret SupportsTM, developing local support groups and programs

Education and Outreach Programs

- Health Care Symposia, on issues unique to younger women facing breast cancer
- Sharsheret on Campus, outreach and education to students on campus
- Sharsheret Educational Resource Booklet Series, culturally-relevant publications for Jewish women and their families and healthcare professionals

VIII. Disclaimer

The information contained in this document is presented in summary form only and is intended to provide broad understanding and knowledge of the topics. The information should not be considered complete and should not be used in place of a visit, call, consultation, or advice of your physician or other health care professional. The document does not recommend the selfmanagement of health problems. Should you have any health care related questions, please call or see your physician or other health care provider promptly. You should never disregard medical advice or delay in seeking it because of something you have read here.

The information contained in this document is compiled from a variety of sources ("Information Providers"). Neither Sharsheret, nor any Information Providers, shall be responsible for information provided herein under any theory of liability or indemnity. Sharsheret and Information Providers make no warranty as to the reliability, accuracy, timeliness, usefulness, or completeness of the information.

Sharsheret and Information Providers cannot and do not warrant against human and machine errors, omissions, delays, interruptions or losses, including loss of data.