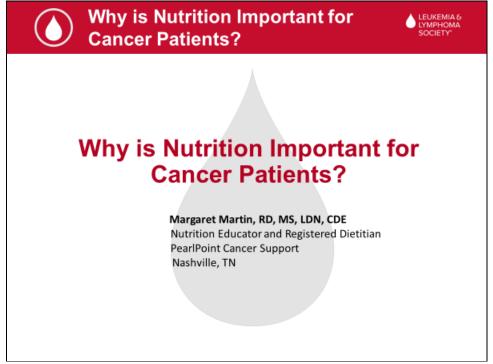


Transcript



Slide 1 - Why is Nutrition Important for Cancer Patients

Ms. Lizette Figueroa-Rivera:

Hello, everyone. On behalf of The Leukemia & Lymphoma Society, a warm welcome to all of you. We have over 1,300 people participating from across the United States and several countries around the world, including the United Arab Emirates, Australia, Canada, Denmark, France, Great Britain, India, Mexico, Sweden, and South Africa.

Special thanks to Margaret Martin for sharing her time and expertise with us today.

And before we begin, I'd like to introduce The Leukemia & Lymphoma Society's Director of Lifestyle Development, Colby Marple, who will share a few words. Colby, please go ahead.

Mr. Colby Marple:

Thank you, Lizette. I would like to add my welcome to the patients, caregivers, and healthcare professionals attending the program today. The Leukemia & Lymphoma Society exists to find cures and ensure access to treatment for blood cancer patients. Our vision is a world without blood cancer. For more than 60 years, LLS has helped pioneer innovation such as targeted therapies and immunotherapies that have improved survival rates and quality of life for many blood cancer patients.

In the spirit of continuing to innovate and advance our mission, I'm excited to announce the launch of our new lifestyle program, which will provide new opportunities for supporters for fund-raise by turning any activity or passion into a movement to cure cancer. Through the efforts of our dedicated volunteers and supporters, we have been able to invest over \$1 billion dollars in research to advance therapies and save lives. Until there is a cure, LLS will continue to fund promising research from bench to bedside.

In addition, as this program demonstrates, we are the leading source of free blood cancer information, education, and support, and we touch patients in their communities through our 58 chapters across the United States and Canada. LLS also acts as the voice for all blood cancer patients. We advocate for



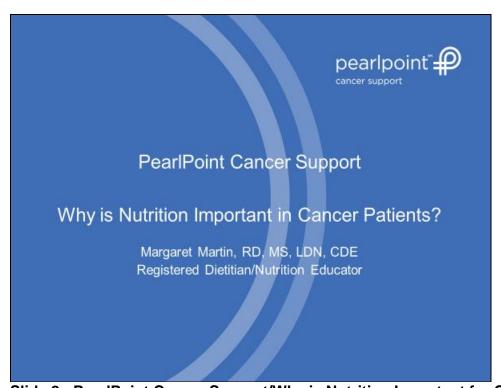
patients, and survivors, and their families, helping them navigate their cancer treatments and ensuring that they have access to quality, affordable, and coordinated care.

We're fortunate to have as our presenter today registered dietitian Margaret Martin, who has focused her expertise to serve patients with cancer diagnosis. We appreciate her dedication to supporting our mission and her commitment to caring for patients living with all types of cancers. I'd like to thank her for providing us today with important information on nutrition.

Thank you, all. And, now, I'll turn the program back to Lizette.

Ms. Lizette Figueroa-Rivera:

Thank you, Colby. And we would like to acknowledge and thank Genentech and Biogen, Bristol-Myers Squibb, and Takeda Oncology for support of this program.



Slide 2 - PearlPoint Cancer Support/Why is Nutrition Important for Cancer Patients

Following the presentation, we will take questions from the audience. We are audiotaping and transcribing this program for future posting on our website. PearlPoint Cancer Support provides free, personalized nutrition consults for patients and caregivers. You can request a free consult by visiting www.LLS.org/Nutrition, or you may contact an LLS information specialist.

I am now pleased to introduce Margaret Martin, RD, MS, LDN, CDE, Nutrition Educator and Registered Dietitian at PearlPoint Cancer Support in Nashville, TN. On behalf of The Leukemia & Lymphoma Society, thank you, Margaret, for volunteering your time and expertise with us today.

Ms. Martin, I'm now privileged to turn the program over to you.

Ms. Margaret Martin:

Well, thank you, Ms. Figueroa and Mr. Marple, for that great introduction to The Leukemia & Lymphoma Society. The Society gives wonderful support to blood cancer research and free education to patients,



caregivers, and healthcare providers. Thank you so much for the excellent work you do. And it is a privilege to be here today to share with you why nutrition is important for cancer patients.

Agenda: • Welcome • Recommendations for Cancer Prevention • Nutrition Considerations in Treatment • Resources • Questions?

Slide 3 - Agenda

Our agenda is, first, I'd like to talk a little bit about recommendations for cancer prevention. Those would be nutrition and lifestyle recommendations; secondly, nutrition considerations during treatment; and then we'll wrap it up with some resource-sharing of evidence-based information and websites that you may want to visit. And, of course, at the end, we'll have our question and answer period.



Objectives:

By the end of the Tele/Webinar you will learn more about:

- How good nutrition assists in promoting better treatment outcomes
- Managing side effects associated with diagnosis and treatment
- Nutrition resources for cancer patients





Slide 4 - Objectives

Our objectives today, by the end of the tele webinar, you'll learn more about how good nutrition assists in promoting better treatment outcomes, managing side effects associated with diagnosis and treatment, and nutrition resources for cancer patients.

Disclaimer

- PearlPoint Cancer Support is a non-profit organization that provides education and resources for adults impacted by cancer.
- Today's webinar is not providing medical information or care. Always ask your healthcare team before making changes to your nutritional strategies, medications, or exercise programs.

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Slide 5 - Disclaimer

Just a disclaimer for today's tele webinar, PearlPoint Cancer Support is a not-for-profit organization that provides education and resources for adults impacted by cancer. Today's webinar is not providing

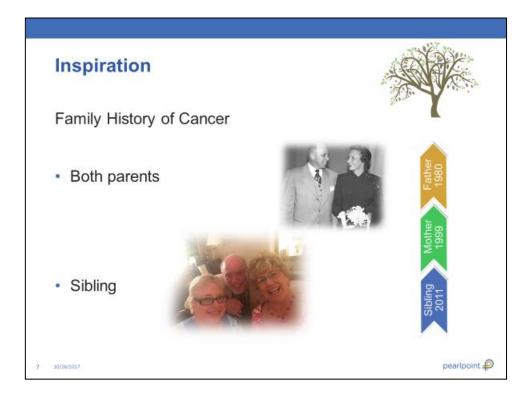


medical information or care. Be sure to always ask your healthcare team before making any changes to your diet, medication, or exercise program.



Slide 6 - One-On-One Nutrition Consultations

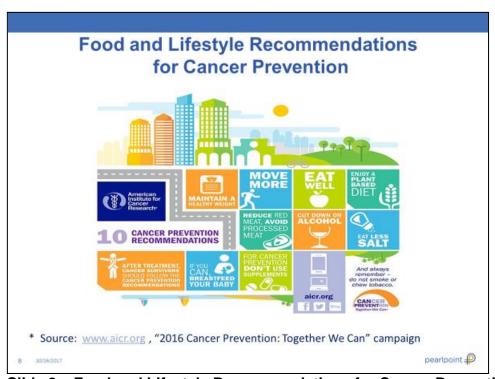
As mentioned previously, we are offering one-on-one nutrition consultations to patients and caregivers. These are complimentary, free of charge. You can call us at PearlPoint Cancer Support or speak with an information specialist at The Leukemia & Lymphoma Society. Or, if you prefer, you can go online at PearlPoint.org or LLS.org/nutrition to fill out an online request form to receive a consultation. And we'll contact you to get that set up.





Slide 7 – Inspiration

Why am I so passionate about nutrition in cancer care? Well, I'll have to start with my family. My family has a heavy history of lung cancer. Both my parents had lung cancer. So, I watched, first, my father go through his journey on a delayed diagnosis of the lung cancer; then, my mother, later on; and now, my sister is almost to her sixth year after diagnosis with lung cancer. I've seen how important nutrition is to help endure treatments, maintain strength and your immunity status, and just what it can do on the other side during survivorship. My father was given about six months to live. At that point, we rallied together as a family and worked on his nutrition to fortify his meals with calories, protein, and other nutrients in a texture he could absorb and be able to use. He ended up living 19 months. So, I think nutrition--that nutrition example, to me, just really motivated me to pursue a focus on nutrition in cancer care.



Slide 8 – Food and Lifestyle Recommendations for Cancer Prevention

Before we can talk about nutrition in treatment, we really need to start with what are some food and lifestyle recommendations for cancer prevention? This is what we know today that will help reduce your risk for various forms of cancer. Much of this information is from the "Together We Can" campaign from the American Institute of Cancer Research, and also, the World Cancer Fund Research Fund. But, they divided the recommendations up into food and lifestyle recommendations, and we use those in survivorship, as well.



Recommendations for Cancer Prevention

Food

- Be as lean as possible without becoming underweight.
- Avoid sugary drinks. Limit intake of energy-dense foods.
- Eat more of a variety of vegetables, fruits, whole grains, and legumes such as beans.
- Limit intake of red meat, avoid processed meat
- · If consumed at all, limit alcoholic drinks.
- · Limit consumption of salty foods.
- * Source: www.aicr.org; www.wcrf.org

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Slide 9 - Recommendations for Cancer Prevention

Let's first look at nutrition recommendations for cancer prevention. The first is have a healthy body weight. Be as lean as possible without becoming underweight. Avoid sugary drinks or concentrated sources of sugar. Eat more of a variety of fruits, vegetables, whole grams, and legumes, such as dried beans and peas. This is a plant-forward or more of a plant-based menu. Limit your intake of red meat and avoid processed meats. This has to do with the fats in the meats and, in processed meats, also, the nitrates and preservatives that are used. If consumed at all, limit alcoholic beverages.

And a new recommendation the last couple of years is limit consumption of salty foods. In America, many Americans eat 4,000 milligrams to 8,000 milligrams of sodium a day. And it's now known that that can be related to increased risk for some of our gastrointestinal cancers.



Recommendations for Cancer Prevention

Lifestyle

- Be physically active for at least 30 minutes every day. Limit sedentary activities
- · Don't use supplements to protect against cancer
- · Avoid tobacco use
- ** It is best for mothers to breastfeed exclusively for up to 6 months of age
- ** After treatment cancer survivors are to follow recommendations for cancer prevention
- * Source: www.aicr.org ; www.wcrf.org

**Special populations

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Slide 10 - Recommendations for Cancer Prevention

Now, let's look at lifestyle. Lifestyle and nutrition go hand-in-hand. I really think of them as being the total package of our habits, choices, and how we live. One recommendation is to be physically active for, at least, 30 minutes per day. Of course, you would need--if you're just coming out of treatment, you'd absolutely need medical clearance for a physical activity program. Limit sedentary activities, like sitting at work more than an hour, perhaps, or sitting at home. Think of new ways to stand up and move every 30 to 60 minutes, as an example.

Don't use herbal preparations or dietary supplements to protect against cancer. The big recommendation is aim to get all the nutrients you need from the foods and beverages that you consume. Avoid tobacco use. So, that would be chewing/smoking any form of tobacco. And, for special populations like mothers and infants, it's best for mothers to breastfeed exclusively for up to 6 months of the infant's age. After treatment, cancer survivors are recommended to follow the cancer prevention suggestions that we have just looked at.





Slide 11 - Food Steps

Now, thinking about food, a big recommendation for cancer prevention is be plant-forward. Flip your traditional plate. If you see the plate on the left, we've got lots of meat maybe covering ½ or ¾ of the plate, and I just see a little green, maybe broccoli, sticking out of the top of the plate. So, that's the traditional American meal from decades ago.

A plant-forward-type or plant-based meal would have ¾ of the plate would be fruits, vegetables, whole grains, legumes, and ¼ of the plate would be protein sources like fish, chicken, poultry, and red meat. It's suggested that you use a plate now instead of thinking of the pyramid food recommendations from the early 2000 year. So, thinking of your plate, try to reduce your meat intake to maybe ¼. You don't have to be a vegetarian to eat well. But, it does help to increase your vegetable, whole grain, and fruit intake.





Slide 12 - More Food Steps

To specifically look at maybe fat and sugar representation, on the left, we see a very energy-dense meal, don't we? We see fried foods, maybe a sweet beverage, lots of gravies, and french fries, and potato chips. That has the same calories, 1,575 calories, as compared to the nutrient-dense plate or menu on the right. So, these both represent a day's food and beverage intake.

Do you see how much food, and color, and variety you're getting on the right with the nutrient-dense plate? And most of these foods can be eaten with a knife, fork, and spoon. That's another way, also, to think about --get foods that you can actually eat with a fork, not out of a package, bag, or box, so to speak. So, nutrient density is a goal versus energy density for healthy people.





Slide 13 - More Food Steps

Another thing to think about or evaluate is your portion sizes. Many of the patients or caregivers that I work with realize that they have what we call, in the nutrition world, portion distortion. To illustrate this, the hamburger in the upper right-hand corner, the small hamburger was what was introduced 20-some years ago at some of our restaurants and cafes. On the right, we have today's burger, which is--can be upward to 900-1,000 calories as opposed to 333 calories in the early, say, 1960s-1970s.

Portions that we receive at restaurants and cafes aren't necessarily what a good, healthy portion for us may look like. Restaurants and cafes like to increase their portions so you'll feel you're getting a good food value. But, just think about what is a good portion for me?

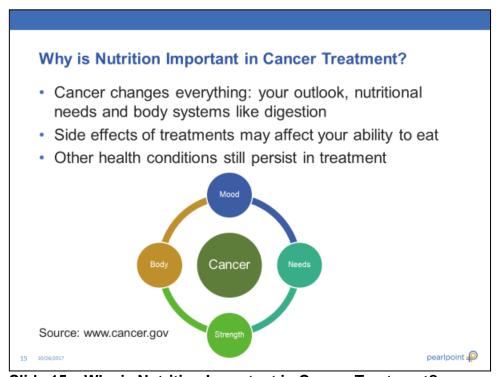
I like to teach that you have many items at home. In addition to your measuring cups, and measuring spoons, and scales, you have many household items that you can compare your food quantity for size. For instance, the size of a deck of cards equals 3 ounces of cooked meat or poultry. A tennis ball can be about a size, good size, of apple or about 1 cup of food. A golf ball is about 1 or 2 tablespoons. And a CD disc equals about a 1-ounce slice of cheese or meat. So, check your portions and make sure you're in balance.





Slide 14 - More Food Steps

Another quick idea to eating healthfully is eat the color of rainbow, the rainbow color of foods. Some authorities tell us that there probably are seven colors of food, which are listed there, all the way from white to brown, green, yellow, orange, red, and blue/purple. So, I like to suggest to folks that they try to have four or five colors of food each week. The different colors represent different nutrient profiles, so you'll have a more adequate balance of nutrients if you eat through the rainbow. Some good resources for that are ChooseMyPlate.gov and FruitsandVegetablesMoreMatters.org. Especially try to add fruits and vegetables to snacks and breakfast.



Slide 15 - Why is Nutrition Important in Cancer Treatment?



Now that we've covered nutrition in cancer risk reduction, let's turn the page and look at why nutrition is important in cancer treatment. Cancer changes everything - your mind, your soul, your body, your physical needs, and systems like digestion and immunity. Side effects of treatment, such as sore mouth, tummy aches, change in smell, may definitely affect your ability or your enthusiasm to eat.

And other health conditions that you may have been diagnosed with before cancer still need management during your cancer treatment. Examples might be diabetes and high blood sugar. So, cancer does change all areas of our lives.



Slide 16 – Good Nutrition is Important

Another reason good nutrition is important, and this is an evidence-based fact, that nutrition that's healthy helps you tolerate your treatments. That's a major goal. Good nutrition at the right time at the right place helps you complete your treatment plan that you and your healthcare team have prescribed.



Good Nutrition - Drives You Through Treatment

- Treatments destroy cancer cells ...also injure healthy cells in bone marrow, digestive tract & hair*
- Cell injury → side effects
- Side effects → roadblocks
- Nutrition can drive you to your destination with fewer detours



Source: Oncology Nutrition for Clinical Practice., Academy of Nutrition and Dietetics Oncology Nutrition Dietetic Practice Group, M. Leser et al editors, 2013.

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Slide 17 – Good Nutrition – Drives You Through Treatment

Good nutrition also has been shown to minimize side effects or help you recover from them more quickly. And, of course, good nutrition helps you improve your immunity status. We know that up to 80% of folks diagnosed with cancer will also be diagnosed with malnutrition somewhere along their cancer journey. So, be prepared with good food choices.

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Good nutrition can help you drive right through your treatments. But, realize that your treatments destroy the cancer cells, but of course, also, injure the healthy cells in your bone marrow, digestive tract, and hair. So, injury, like to our digestive tract, means side effects. The food may not move at the right pace through your stomach and intestines, for example. Side effects can really put up roadblocks for you if you don't know how to work around them. They can cause you to feel bad, not be able to keep your appointments or enjoy a quality of life that you're striving for.

Good nutrition can drive you to your destination, which is completing your treatment, with fewer detours. This has been proven. Working with a registered dietitian can help you reduce infection rates and admission days into in-patient hospital stays.



Good Nutrition - A Roadmap at the Right Time

- Roadmap → Evidenced-based information from reliable resources used as an atlas → Nutrition Plan
- Considers other diagnosis
- Understands nutrition's affect
- Delivers at the right time
- Adapts your journey as you may need to change routes





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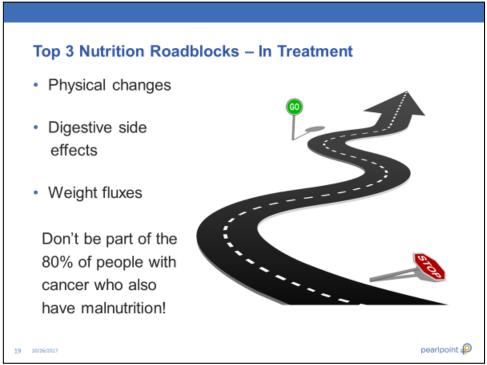
Slide 18 – Good Nutrition – A Roadmap at the Right Time

So, what are we talking about when we say "good nutrition?" Well, good nutrition, using the travel analogy, is like a roadmap. Good, evidence-based nutrition information from our reliable sources can be used as an atlas or a map, what we like to call a nutrition plan. It also considers other diagnoses you may have, like kidney problems or blood sugar challenges.

A good nutrition plan helps you understand nutrition's effect on how you feel and the ability to withstand your treatment. And, hopefully, you'll get good nutrition at the right time. Many people we speak with, as registered dietitians, already have lost a great amount of weight before they are actually diagnosed. So, it helps to get good nutrition right from the start.

And having a great nutrition plan adapted for you helps you on your journey in case you need to change routes. Maybe it's decided you need chemo before you have surgery or vice versa. So, good nutrition will help you withstand those changes.





Slide 19 - Top 3 Nutrition Roadblocks - In Treatment

Today, we're going to talk about three of the most frequently seen roadblocks in the patients I speak with during treatment. Those will be physical changes, digestive side effects, and changes in our weight. I'd like to cover these so you will not be part of that 80% of patients who have malnutrition, as well as cancer, along the way.



Slide 20 - Physical Changes



Well, let's start today with physical changes. What are we speaking about here? One is anemia and white blood cell issues. Another is difficulty swallowing and dry mouth. And third is sore mouth, tongue, and throat, and fatigue. Let's look at strategies to help you manage those.

Anemia

- Anemia or inadequate red blood cells occurs during cancer for many reasons
- · Increase intake of iron rich foods
- Iron from meat, fish and poultry is better absorbed than from plants
- Use foods high in Vitamin C like citrus, melon, dark green leafy and potatoes
- Choose fortified grain products like cereals
- Slow down on coffee/tea at meals that decrease iron absorption

Source: "Nutrition Care Manual," Academy of Nutrition and Dietetics, 2017. www.MyPearlPoint.org

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Slide 21 - Anemia

Anemia or inadequate red blood cells occur during cancer for many reasons. It might be an increase--you might need to increase, to fight that, of iron-rich foods. We know iron from red meat has a special type of iron called heme, and it's absorbed and used more readily than iron from poultry and fish. But, they are still well-absorbed.

Use foods in high Vitamin C, if you can, like citrus, melons, berries, green leafy--potatoes and green, leafy vegetables. Choose fortified grain products, like breakfast cereals are fortified with iron. And slow down on coffee and tea at meals because coffee and tea have a component that actually blocks your iron from being absorbed efficiently at a meal.



Low White Blood Cell Count

- Low white blood counts (leukopenia) can occur due to treatments
- Very low neutrophils = neutropenia
- Practice hand-washing for 15-30 seconds with soap and warm running water
- Avoid raw meat, eggs and fish as well as expired food, unwashed or moldy fruits and vegetables, and unpasteurized beverages
- Wash fresh fruits and vegetables well prior to preparation. Consult your healthcare team
- Avoid well water unless tested safe, boiled or filtered

Source: www.oncologynutrition.org; www.cancer.org; www.lls.org



Slide 22 - Low White Blood Cell Count

What about those low blood cell counts? Low blood cell counts, or leukopenia, can occur due to treatments. If you have very low neutrophil counts, that's called neutropenia. What can you do to help you stay safe during these times?

Well, the number one thing doesn't take any special equipment or food. It's simply practicing good handwashing for 15 or 30 seconds with soap and warm, running water. If you are experiencing neutropenia, avoid raw meat, eggs, fish, of course, and any expired foods - check your dates - unwashed or moldy fruits or vegetables, and unpasteurized beverages. Be sure to wash fresh fruits and vegetables well prior to slicing them or preparing them. Even if you're not going to use the peel, still wash them before slicing. Avoid well water unless it's tested to be safe, boiled, or filtered. And work with your healthcare team on where you are with your low white blood cell counts.



Neutropenia and Neutropenic Diet

- · Patients have very low WBC counts
- Example: Patients with a stem transplant
 Nutrition plays a vital role in your care plan
- · Very low neutrophils = neutropenia
- Strict adherence to food safety is priority 1
- You may be prescribed an antimicrobial or neutropenic diet
- Avoid raw or undercooked foods (meats, fish, poultry and vegetables) and unpasteurized dairy products
- Follow the instructions at your cancer center

Source: www.dana-farber.org www.lls.org

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Slide 23 - Neutropenia and Neutropenic Diet

We also get a lot of questions about neutropenia and the neutropenic diet. Traditionally, the neutropenic diet has been prescribed for folks who have very low neutrophil counts as we discussed. Traditionally, patients with stem cell transplant are very--it's very vital to be on a neutropenic diet because nutrition plays a vital role in your healthcare. Usually, the center where you might receive your stem cell transplant will have a nutrition plan and guidelines for you. So, it's very important to adhere strictly to that.

The neutropenic diet has also been called the antimicrobial diet, as well. Avoid raw or undercooked foods on this plan and any unpasteurized dairy or some--we do have unpasteurized honey and fruit beverages that are made at fruit bars. So, you might want to avoid those, as well. But, you'll be given specific instructions about that to follow at your cancer center.



Difficulty Swallowing

- Add moisture with spreads, gravies, syrup or sauces on breads, meats and vegetable
- Choose canned veggies and fruits and their juices in place of raw fruits or vegetables
- Use a blender to soften your foods
- · Stir in extra protein to what you consume
- · Sip after each bite of food
- Avoid dry foods, such as toast, bran or hard breads, unless you moisten or soak them first (in a gravy or sauce)
- Notify your healthcare team if swallowing difficulty persists or gets worse





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Slide 24 – Difficulty Swallowing

What about difficulty swallowing? If you're not able to get your food efficiently chewed and swallowed, then it's not going to be able to enhance your nutrition status. So, add moisture to your food with spreads, gravies, syrups, etc. You might want to use canned vegetables and fruits because they have excess moisture that will help you in swallowing. Or use some juices in place of those raw fruits and vegetables. Use a blender to soften your foods. Stir in some extra protein maybe in what you do consume in case you can't eat regular meats. Take a sip of fluid after each bite, and slow down on the dry foods, like toast or hard breads, unless you moisten them or soak them first in a gravy, sauce, or jelly. And, please, stay in touch with your healthcare team if your swallowing gets worse.



Dry Mouth

- Practice good oral hygiene
- · Rinse your mouth often
- · Choose moist, soft foods
- Keep hydrated
- Chew sugar-free gum or suck on sugar-free mints
- Stay out of the sun if you find that the sunlight makes you thirstier
- Freeze small pieces of fruit to suck on, such as grapes or strawberries

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Slide 25 - Dry Mouth

What about dry mouth? Some of the strategies to cope with dry mouth is practice good oral hygiene. Rinse your mouth often, most people suggest before and after you eat. Keep your foods moist and soft in texture. Be well-hydrated yourself throughout the day. Some people find chewing or sucking on sugarfree gum or candies help produce some moisture and saliva in your mouth. And stay out of the sun because sun, in fact, makes some people thirstier, and you need to be well-hydrated. Also fun is to freeze small pieces of fruit to suck on, such as grapes, strawberries, or chunks of bananas, and those help produce saliva in your mouth, as well.

Sore mouth, throat and tongue

- · Choose a softer diet
- Avoid acidic foods such as vinegar, citrus fruits, tomatoes or very hot items
- Eat small, frequent meals and snacks and add soft proteins such as cheese, eggs, yogurt, custard, beans, ground meats, and smoothies
- Add moisture to dry foods, such as toast or hard breads: adding gravy, syrup or sauce
- Eat foods at room temperature or cold, rather than hot

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Well, what if you still have a sore mouth, tongue, and throat? Well, be sure to choose a soft diet, foods that can be eaten with a fork. You may not even need a knife for a soft diet. Stay away from any acidic foods that may burn or very hot-temperature foods like soups and warm beverages that are way over the warm category. Eat small, frequent meals and snacks, and choose soft proteins often. Add moisture to foods as we've talked about before with gravies, syrups, or sauces. And try to see if eating a menu of foods at room temperature or cold rather than steaming hot helps.

Sore mouth, throat and tongue Brush teeth before eating. Homemade Mouth Rinse Make fresh daily and store in clean jar. Mix 4 cups water with 1 tablespoon baking soda. Rinse after meals and before bedtime. Ask your healthcare team about special mouth wash or rinse or sprays that can numb the mouth and throat. pearlpoint ₽

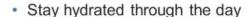
Slide 27 - Sore mouth, throat and tongue

Also, brush your teeth before eating. We collect bacteria and other organisms in our mouth that may contribute to oral problems. Use a homemade mouth rinse. You can make it daily with a quart of water mixed with a tablespoon of baking soda, and rinse after meals and before bedtime. Make up a new quart of this homemade rinse every day. And, if you still persist with problems, ask your healthcare team about a special mouth rinse or sprays that can help numb your throat and mouth area.



Fatigue

- Keep on moving
- Modify routines and schedules
- · Fuel up every 3-4 hours
- Eat foods that provide sustainable energy, especially whole foods and proteins









Slide 28 - Fatigue

What are some fatigue-fighters? Well, strategies to fight fatigue, recent research, shows physical activity has done more for many patients than other things to help them fight fatigue. So, if you're clear for physical activity, keep physical activity in your routine. Be realistic about your schedule. You may not be able to do everything you did two or six months ago, so be good to yourself and slow down. Eat frequently. Choose foods that provide sustainable energy, like proteins and whole foods, and be sure to stay hydrated.

Fatigue: Food Planning and Preparation

- Shop and cook smart: lists, menus, apps and variety
- Explore helpful tools: timer, gloves, lid opener, wide handles, non-slip fabric, knife cover, thermometers, lightweight unbreakable containers
- Cook ahead, date and freeze
- · Ask for help and enjoy!

Sources:

https://www.mskcc.org: "Patient Guide-Peripheral Neuropathy", accessed September 30, 2017. "Cooking With Neuropathy", Diabetes Management, updated August 19, 2016

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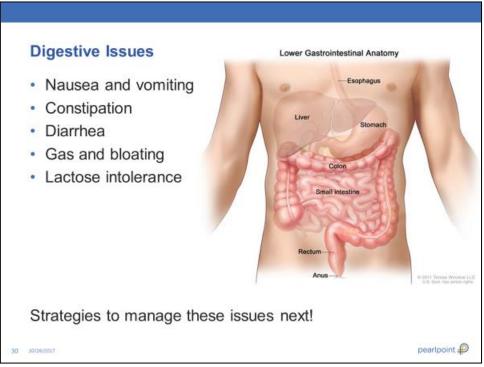




Slide 29- Fatigue: Food Planning and Preparation



Some other tips to fight fatigue is be smart about your food planning and preparation. Use lists, menus, or grocery apps to help communicate with your family members and friends that may want to shop for you. Explore tools to help you, especially if you have neuropathy in your hands. Timers, gloves, lid openers, wide handles on your utensils help. Cook ahead, date the food, and freeze so that your cooking may be on a Sunday, and you might--can enjoy those meals later on in the week. Ask for help. Many people want to do something for you, and grocery shopping or cooking might just be their specialty.



Slide 30- Digestive Issues

Next, let's think about digestive issues. Our digestion we don't think about much until it stops working efficiently. What are we speaking about when we think about digestive issues? Well, they can cover nausea and vomiting, constipation, diarrhea, gas, bloating, and food intolerances like lactose intolerance. Let's look at some strategies to help those.



Nausea and Vomiting

- Keep on track with your anti-nausea medications
- · Avoid triggers like strong smells and skipping meals
- Eat five to six small meals or snacks
- · Stay cool. Wear loose clothes. Relax at meals
- Choose foods that soothe
- · Drink most beverages between meals
- Rehydrate if you do vomit by drinking clear liquids and electrolyte beverages





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Slide 31- Nausea and Vomiting

Nausea and vomiting, number one. Keep on track with your anti-nausea medications. Sometimes, folks I talk with don't take their nausea medicine until they're extremely ill and almost dehydrated. That's not going to help very much to start using your anti-nausea medicine at that point. That's kind of like you've let the cow out of the barn and you're not going to be able to use the cow anymore. So, talk with your healthcare team and see if you can take your anti-nausea medicines proactively.

Try to stay away from triggers for nausea like strong aromas and smells. Do not skip meals. Skipping meals, for many people, brings on nausea. So, try to eat frequently, four to six small meals or minisnacks a day. Be comfortable. Stay cool. Wear loose clothing that allows your digestive tract to freely move and process the foods that it needs. Have a pleasant, relaxing meal. Choose foods that can help you sooth. Try to drink most of your beverages between meals so that your stomach won't fill up too quickly with liquids. However, if you do vomit, rehydrate quickly by drinking clear liquids like apple juice, broth, and electrolyte beverages.



Constipation

- Choose 6 to 8 glasses of fluid daily for hydration
- Choose soups, shakes, nutritious drinks, gelatins, popsicles, ices and juices as fluids too



- Eat fiber through the day
- Enjoy fiber at bedtime like bran cereal, prunes and prune juice
- Stay active to support digestion
- Talk with your healthcare team for extra help



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Slide 32- Constipation

What about constipation? Constipation can occur for many reasons during cancer treatment. There are two, at least two, strategies that work together. One is adequate hydration, whatever that means for you. Often, we say six to eight glasses of fluid a day. That can be water, soups, gelatins, popsicles, sodas, whatever works for you. And choose those liquids that are nutritious as well as hydrating.

Spread your fiber out throughout the day. So, you might have a high-fiber cereal at breakfast, maybe a whole wheat tortilla at lunch with all the fixings, and supper might be stir-fry with lots of good vegetables and brown rice. Enjoying fiber at bedtime with fluid often helps folks have a nice bowel movement in the morning. And, if possible, stay active to support good digestion.



Diarrhea

- Choose clear liquids. Examples: sodas, Jell-O, tea, decaf coffee, popsicles, apple or grape juices, water, clear liquid nutritious beverages and broth
- Add back slowly crackers, rice, applesauce, ripe banana, toast, and other soft foods
- Use low fat foods and easily to digest menu items
- Contact your healthcare team if diarrhea persists







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Slide 33- Diarrhea

The opposite of constipation can be diarrhea. If that happens, you are going to be on a--what we call a clear liquid menu, such as sodas, gelatins, tea, decaf coffees, popsicles, juices, and clear liquid nutritious beverages and broths. After your diarrhea slows down, slowly add back easy-to-digest items like crackers, rice, toast, banana, and other soft foods. Then, add back low-fat foods that might be easy to digest. But, do contact your healthcare team if diarrhea persists. Then, each provider usually has their own protocol for when to call when you have diarrhea.

Gas and Bloating

- Avoid belly bloating foods such as spicy or high fat foods, gaseous foods, sodas, acidic drinks, salads and raw veggies
- · Go for slow and small meals
- · Try non-dairy milk
- Drink from a cup not a straw
- Stay active to assist in digestion
- Use mints and less chewing gum
- Consult your healthcare team for help



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Slide 34- Gas and Bloating



What about gas and bloating? Gas and bloating can take away your appetite, and sometimes, your enthusiasm for eating. So, you may need to slow down on spicy foods or high-fat foods like fried foods or foods with sauces that have a lot of fat in them. Also, some foods also have a lot of gas in them, like sodas, and raw vegetables in salads can cause gas.

So, go for slow, you know. Eat slowly and eat small volumes at your meals. Try non-dairy milk. You may be becoming lactose sensitive, and that may be giving you gas. Try to drink from a cup, not a straw, which adds gas. Try to stay active, and use mints and less chewing gum. And be sure to ask your healthcare team for help.



Slide 35- Lactose Intolerance

What about lactose intolerance? As we go through life, we usually make less of the enzyme that digests milk sugar. Milk sugar is called lactose. Then, when we are in treatment, sometimes we lose the ability to make that enzyme called lactase. So, you might need to use a lactose-free milk product, and then, balance out your calcium intake with those calcium-rich foods, like green, leafy greens, broccoli, sardines, tofu, or calcium-fortified foods. And ask your medical team if over-the-counter lactase enzymes might be appropriate for you.





Slide 36- Weight Fluxes: Maintaining a Healthy Weight

What if you have weight fluxes? Weight fluxes can occur because you feel full quickly, you lose your appetite, or your treatments, especially steroids, may actually cause you to gain weight. So, let's look at some strategies for feeling full quickly.



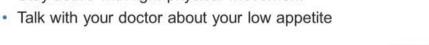
Slide 37- Feeling full quickly

Sit down and be mindful at meals. Slow down the speed. Eat small meals. Make your mealtime fun with friends. Eat your protein or nutrient-rich or nutrient-dense food first. That way, you'll get the most nutrition if you do fill quickly. Drink mostly between meals and just sip at meals so you can get the good nutrient-dense foods. And try taking a five- or- ten-minute walk after meals.



Loss of appetite

- Plan relaxing meal atmosphere
- · Keep your favorite foods on the table
- · If you are a caregiver, ask: "What can you eat for energy?" "What can you eat now?"
- Try nutritious beverages (high nutrition for small volume)
- Eat by the clock
- · Stay active with light physical movement



Slide 38- Loss of appetite

What if you lose your appetite? This is one of the major side effects that we work with as registered dietitians. Well, think about what you did to make a happy meal or a pleasant meal before your cancer was diagnosed. Well, you had a great atmosphere. You might have your favorite foods on the table. You might invite folks that you enjoy to have a meal with you. These all help stimulate a rebuilding of your appetite.

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If you're a caregiver or a friend, you might ask the person with cancer what can you eat for energy or what do you think you can eat for strength now? So, using the words strength, fuel, and energy often are more motivating for a person with cancer.

Try some nutritious beverages if you don't feel like eating a meal. These are high nutrition for a very small volume. Eat by the clock. You're no longer going to be able to tell by just your appetite if it's time to eat. Stay active, if you can, with just some light, low-impact physical movement. And talk with your healthcare team about options for low appetite.



Foods You May Want To Try

- Fortified cereals, breads and beverages
- Greek yogurt, Kefir and cheese
- Whole grain crackers, pasta and cereals
- Fruit parfaits
- Hearty soups
- · Casseroles with added vegetables and protein
- Dips, hummus, cheese and spreads at snacks
- · Muffins, wraps, and sandwiches when on the go!

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Slide 39– Foods You May Want to Try

Some foods you might want to find--might want to try if you have a low appetite are foods that are fortified or have calorie or protein added to them, like cereals, breads, and beverages. Greek yogurt, Kefir, and cheese are easy to eat. They have lots of nutrient-dense properties. Whole grains, maybe a fruit parfait, the cool foods might work better than a hot food. We're getting into the autumn and winter seasons, so if you can tolerate hot foods, a hearty soup, or stew, or casserole might be great. And think about your snacks. That's a great way to get extra nutrition.

Weight changes

- · Stay at a healthy weight for you
- Plan ahead to eat well
- Eat what tastes good then add new flavors and textures too
- Loss of 5% of your baseline weight = nutrition issue
- Treatment time is NOT the time to diet to lose weight
- Fortify your menus to gain weight
- Talk to a Registered Dietitian if you have questions and multiple health challenges

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Slide 40- Weight changes



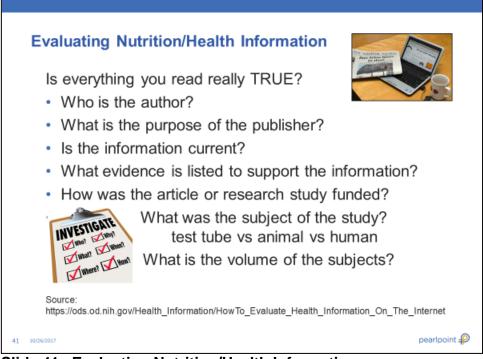






What about weight changes? We now know that losing 5% of your body weight within the month is bad for you. So, try to stay at a healthy weight. During cancer is not a time to go on a weight reduction plan.

How do you do that? Well, plan ahead to eat well. Eat what tastes good to you, and then add some new flavors and textures. As we said, loss of 5% of your baseline weight is a nutrition issue, so bring it up to your healthcare team. Fortify your menus to gain weight. And talk to a registered dietitian if you have multiple health issues, food allergies, and weight loss.



Slide 41– Evaluating Nutrition/Health Information

Now, where do we get good, reliable health information? Often, when folks are diagnosed with a cancer, the patient, or caregiver, or friends will immediately go where? They'll go to the internet and start looking up information about their diagnosis.

But, is everything that you read or see in print or on TV really true? I would say you need to ask yourself certain questions to find that out. Ask who is the author of this information? You know, what are their credentials? And what is the purpose of the publisher or website where the information is seen? Are they trying to sell you something, or are they trying to give you good information, or are they trying to get your information for other purposes?

Is the information that you see current? We like to use information that's been published, you know, within the last three to five years. Nutrition has greatly changed through the decades. So, what we used to think was healthy for a person might not be what's recommended now.

And what evidence or research is listed to support the information that you're reading online or in a magazine? And, if you can, how was the article or research study funded? Was it funded by a special interest group? What was the subject of the study? You know, the subjects could be a test-tube study, an animal study like in mice, or the human subjects, which are often the best, of course, research subjects. And how many or what was the volume of the subjects in the research, you know? Ten or twenty subjects, the research outcomes are not going to be as reliable as if you had, you know, 500, 2,000, 10,000 human subjects in the study.



So, be careful where you get your information. I recommend evidence-based websites and printed information, such as the website might end in ".edu." That means a university setting. ".gov" is a government organization like the National Cancer Institute (NCI). ".org" is a not-for-profit organization like The Leukemia & Lymphoma Society and PearlPoint.org.

Nutrition is Priority #1 in Travel to your Destination Benefits of Good Nutrition: • Nourish tissues and cells for repair and maintenance • Maintain weight, muscle, strength → immune function • Support laboratory values: hemoglobin, vitamins, glucose • Protect cognitive thinking and thought processes • Go to your destination: complete your treatment plan, enjoy life and keep travelling

Slide 42- Nutrition is Priority #1 in Travel to your Destination

So, to wrap it up, nutrition is your number one job during cancer treatment just as your physician and your radiologist are--they're concentrating on your treatments. Your job is to keep on nourishing your tissues and cells so that they can be repaired and maintain good health and vitality. Your goal is to eat well to support lean body mass that we call muscle, and that's what gives you strength and immunity.

Another area, good nutrition helps you have better lab values over time. You'll probably be evaluated for hemoglobin, iron status, vitamins, and blood glucose. So, good nutrition can help support those values.

Also, eating well can help you protect your cognitive thinking and what we might think of as our thought processes. Are we thinking straight, you know? Are we making sense when we talk? Or are we starving ourselves un-healthfully just to keep a certain weight during treatment, which isn't good?

So, go to your destination, complete your treatment plan, enjoy life, and keep traveling, all good benefits of nutrition.



Other Helpful Nutrition Websites

· PearlPoint.org

PearlPoint Cancer Support

· www.LLS.org/nutrition

The Leukemia & Lymphoma Society

· eatright.org/find-an-expert

Find a RD near you with oncology skills

www.Oncologynutrition.org

Academy of Nutrition and Dietetics

· AICR.org

American Institute for Cancer Research

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Slide 43- Other Helpful Nutrition Websites

What are some helpful resources or websites when we get to nutrition? PearlPoint.org is the PearlPoint Cancer Support website. Of course, LLS.org/nutrition is The Leukemia & Lymphoma Society. The American Academy of Nutrition and Dietetics, the professional group that registered dietitians belong to, is EatRight.org. If you want to find a registered dietitian near you, you can click on their Find an Expert link. And we have the special practice group, the OncologyNutrition.org practice group of the academy, and then, as mentioned previously, the American Institute for Cancer Research. These are all sources of reliable, correct, evidence-based information.

So, that concludes my presentation.

Ms. Lizette Figueroa-Rivera:

Thank you, Ms. Martin, for your very informative presentation. And, also, working with you, I've learned that patients should always ask their treatment teams if they should avoid certain foods or supplements while taking certain medications, as some foods like citrus may be contraindicated with some medications, meaning they can affect the absorptions of your medications. So, we do encourage you to initiate a nutrition conversation with your treatment teams and to ask about any nutrition changes or restrictions you may encounter throughout your cancer journey.





LEUKEMIA 6 LYMPHOMA SOCIETY"

Q&A Session

Ask a question by phone:

 Press star (*) then the number 1 on your keypad.

Ask a question by web:

- Click "Ask a question"
- Type your question
- Click "Submit"

Due to time constraints, we can only take one question per person. Once you've asked your question, the operator will transfer you back into the audience line.

Slide 44- Q&A Session

It is now time for the question and answer portion of our program.

Ms. Lizette Figueroa-Rivera:

The first question comes from our web audience. Maxine asks, "Are you aware of how a ketogenic very low-carb, high-fat, moderate-protein diet can improve cancer outcomes?"

Ms. Margaret Martin:

That's a great question, Maxine. Ketogenic diets have been around for a long time. They were originally used for weight loss. Most of the research about ketogenic diets in cancer has been done on mice and specific types of brain tumors. So, we are just now seeing research being done in other types of cancers.

A very low-carb, high-fat, protein diet could be contraindicated in some instances depending on your health if you have, for instance, you know, liver involvement or digestive involvement. So, I would suggest that you ask your medical team if a ketogenic diet would be good for you. That would be my best recommendation.

Ms. Lizette Figueroa-Rivera:

Thank you, Margaret. I will take the next question from the online audience. Gary asks, "My doctor said that I am not getting enough electrolytes and suggested I drink something like Gatorade. However, it seems to have a lot of sugar. Can you recommend something else?"

Ms. Margaret Martin:

All right. Electrolyte balance often is a challenge, especially if you are having digestive problems. You may know that or may not know that Gatorade also makes G2, which has less carbohydrates in there but a very similar electrolyte balance or content, which we're talking about usually potassium, sodium, maybe magnesium. So, G2 is one idea. Some people actually water down some of those or make popsicles out of them. So, that's another idea.

The competitor is PowerAde and Pedialyte, not that we recommend one brand over another. But, you might want to look at some, you know, the G2, or some of the lighter electrolyte solutions. There are

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recipes on our website, as well, for an electrolyte solution that has much less carbohydrates in it, as well, at MyPearlPoint.org, (on the Pearlpoint website: Make a homemade electrolyte replacement drink by mixing the following ingredients: ¼ teaspoons salt, 8 teaspoons sugar, 3 tablespoons orange juice concentrate, and 4 cups water).

Ms. Lizette Figueroa-Rivera:

Thank you. And we'll take the next question from the web audience. Grace Ann is asking how to curb appetite when taking steroids along with oral chemo, how to lose weight or not gain weight when on steroids during treatment.

Ms. Margaret Martin:

Grace Ann, that is one of the most frequent questions we get during our education sessions. Of course, steroid protocols are necessary to protect your organs during treatment. For some people, they do cause an extra excitement or people are more--their appetite, in other words, is more improved on steroids.

So, one idea is to think about what you're eating, Grace Ann. You might want to go more for high fiber foods, if you can tolerate them, because they make us feel satisfied quicker. Using fluids that are low calorie or calorie free helps you feel satisfied. Thinking about going to evaluate your sodium intake and your simple sweets intake, they tend to, in some people, cause weight gain and water retention, so reducing your sodium intake and sugar intake if that's a problem for you.

I find eating on a schedule helps people, planning ahead a little bit so that you just don't grab the first thing you see, which might be that high-calorie hamburger, for instance, that we saw earlier that maybe 900 calories, so planning ahead. Think about high fiber, good hydration. Go fresh with foods if you can. Eat, you know, fresh foods that don't have a lot of sodium and preservatives in them, which may cause retention. Those would be some great suggestions for you, Grace Ann.

Ms. Lizette Figueroa-Rivera:

Thank you. And we'll take the next question from the phone audience, please.

Operator:

Our next question comes from Martha calling from Maryland. Please state your question.

Ms. Martha:

We enjoy veggie burgers, and I know there's some soy in them. And I was concerned about what should I--should I be concerned about eating them maybe once a week or once every other two weeks? I am-this is my 11th year from lymphoma, and I'm doing well. But, unfortunately, I have pancreatic cancer. But, that can be taken care of because it's all in the tail. But, soy has been a question for me for a long time.

Ms. Margaret Martin:

Well, thank you, Martha. I'm glad you brought up soy. Soy is often thought to be on the Do Not Eat list. But, we know, especially women that have had soy in their lifestyle and meal intake for years, do better after treatment than ladies that haven't had soy in their diet.

Ms. Martha:

Oh.

Ms. Margaret Martin:

So, soy is often talked about around breast cancer. But, you said you had--you're a lymphoma survivor for 11 years.

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Ms. Martha:

Mm-hmm.

Ms. Margaret Martin:

Bravo.

Ms. Martha:

Yes.

Ms. Margaret Martin:

So, soy is a great source of protein. You know, it also has fiber. Not many of our protein sources have fiber, which is--.

Ms. Martha:

--Mm-hmm.

Ms. Margaret Martin:

You know, fiber is a great probiotic. So, personally, I don't see any problem with having a veggie burger once a week.

Ms. Martha:

Okay, thank you.

Ms. Margaret Martin:

Thanks.

Ms. Lizette Figueroa-Rivera:

Thank you. And we'll take our next question from the web. Joy asks, "Is sugar in the raw, honey or maple syrup any better than simple refined white sugar?"

Ms. Margaret Martin:

All right, Joy. Sugar in the raw, honey or regular other forms of sugar? Well, our body just recognizes the chemical composite of sugar, whether it's sugar in the raw, honey, molasses. There are some small advantages with molasses because it has some extra minerals in it.

But, our body just basically sees sugar as sugar, Joy. So, there is no large advantage to using the different types of sugar that you mentioned. Moderation in all things, I think, is very helpful.

Ms. Lizette Figueroa-Rivera: Thank you. And we'll take the next question from our phone audience.

Operator:

Our next question comes from Sherri calling from New York. Please state your question.

Ms. Sherri:

Yes. I'd like to find out how would you use probiotics? Is probiotics any benefit to people who have, let's say, CLL or any kind of other blood condition as a means of gut, checking your gut?

Ms. Margaret Martin:

Okay, Sherri, are you speaking about like a dietary supplement of probiotics or probiotics in food?

Ms. Sherri:

Probiotics as a dietary supplement.



Ms. Margaret Martin:

Okay. So, probiotics are widely available now. We always suggest you ask your doctor about it. Not everyone is suggested to take probiotics as a dietary supplement, and not all supplements of probiotics are equal, you know. Some of them have three strains of probiotic. Others just have one, for instance.

I like to suggest to people to get probiotics from their food choices, Sherri. A lot of the research on our gut flora have been done with actual food intake. So, our probiotic-type foods are foods with fiber, you know, our fruits, vegetables, whole grains, Kefir. Yogurt is also one, sauerkraut, pickles, and if you like spicy things, kimchi also is a popular probiotic.

So, I don't recommend probiotics unless your physician has suggested them for, you know, a brief period of time after antibiotics or an insult to your GI tract. Go for the probiotics in food.

Ms. Lizette Figueroa-Rivera:

Thank you. And our last question comes from Sandra. Sandra asks, "Why isn't nutrition incorporated into all oncology programs? My institution only gives nutrition programs to diabetic oncology patients."

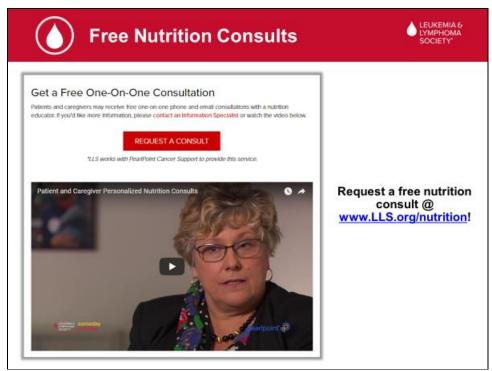
Ms. Margaret Martin:

Well, this is one subject that's near and dear to my heart, Sandra, the availability or access to nutrition care during your oncology journey. It's the decision, often a business decision, of your medical center whether or not they're going to offer nutrition services at your cancer center. The certification for community care cancer centers only requires access, and that could be through a referral, to a registered dietitian. That registered dietitian, you know, may be across the street or they may be 50 miles away, which may not be realistic for many people.

So, I encourage patients to ask their providers the same question you've asked us, Sandra. Why don't you have access on campus, on-site, to a registered dietitian? This is also a national question that's being researched now.

The National Institutes of Health (NIH), for the past year and a half, has gotten together a lot of the decision-makers - physicians, nutrition experts, oncology experts, public health experts - to figure out how can we support more or better access to nutrition during oncology? So, I think we'll hear more about that in the future, but I encourage patients, families, caregivers, primary care physicians to, you know, lobby their local cancer center for on-site nutrition care.

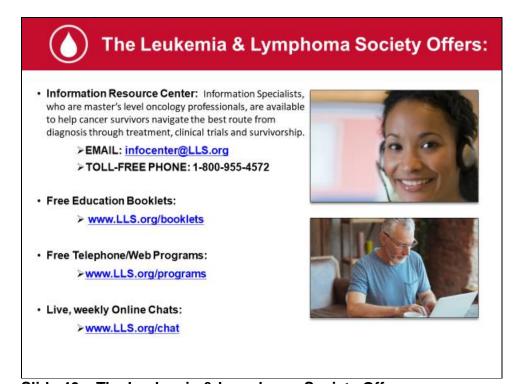




Slide 45 - Free Nutrition Consults

Ms. Lizette Figueroa-Rivera:

Well, thank you. Thank you all for your questions, and a special thanks to Ms. Martin for sharing your expertise with us today. We hope the information from today's program will assist you and your family in your next steps.



Slide 46 – The Leukemia & Lymphoma Society Offers

If we weren't able to get to your question today or you want to schedule a free nutrition consult, contact an Information Specialist at The Leukemia & Lymphoma Society at 1-800-955-4572 from 9:00 a.m. to 9:00



p.m. Eastern time. Or you can reach us by email at infocenter@LLS.org. Information Specialists are available to answer your questions about treatment, including clinical trials, or answer other questions you may have about support, including financial assistance for treatment.



Slide 47 - The Leukemia & Lymphoma Society Offers

Again, we would like to acknowledge and thank Genentech and Biogen, Bristol-Myers Squibb, and Takeda Oncology for support of this program.



Slide 48 – Thank You for Participating!

On behalf of The Leukemia & Lymphoma Society, thank you all for joining us for this program. Take good care.