



## **Podcast Transcript: Nutrition Suggestions for Multiple Myeloma Patients**

**HOST:**

Amanda, thank you for joining us.

**LEUKENGA:**

Thank you. It's a pleasure to be here.

**HOST:**

Let's start off by talking about food safety for patients going through a stem cell transplant. After a transplant, the immune system is weakened and therefore patients need to be very careful about what they eat.

So if patients or their caregivers are going grocery shopping, what kinds of foods should they be looking for and what should they avoid?

**LEUKENGA:**

That's a great question. As you mentioned, the immune system is often weakened, and this puts patients at an increased risk for food-borne infection. At the grocery store, it's important to check "sell by" and "use by" dates. Follow expiration dates as well at home, and get rid of those things in your fridge that have expired.

Avoid foods with damaged packaging, such as dented or bulging cans or any packages that may have come open in shipping. Avoid any food from bulk containers if you won't be cooking them prior to consumption.

**HOST:**

Okay, and can you give some advice about how food should be stored and handled in order to minimize the risk of food-borne illness as much as possible?

**LEUKENGA:**

At the grocery store, you really want to make sure that you are shopping for your shelf-stable items first. Save the refrigerated and frozen foods for last, and make sure that you're going home. I think often we run errands after grocery shopping and don't realize that even a couple of hours can cause bacteria to grow.

So make sure you're chilling your food. Also, you want to keep clean countertops and clean refrigerators and freezers. Make sure that you don't overpack your refrigerator so that the air is able to circulate well.



It's a good idea to change your dish towels daily and make sure your sponges are clean. That can be a site for bacteria to grow. For your refrigerator, you want to keep foods below 40 degrees Fahrenheit and in the freezer below zero degrees Fahrenheit.

**HOST:**

Can you give us some tips on how food should be prepared?

**LEUKENGA:**

Well, the first tip is always going to be to wash your hands frequently throughout preparation. After handling any raw foods and between steps, you really want to spend about 20 seconds with warm water and soap, rubbing your hands vigorously.

As far as meats, make sure that you thaw those in the refrigerator. We don't want them to be left out at room temperature. You can also use the microwave if you need to speed the process up.

You may want to have two separate cutting boards, one which you can use for meat and the other for fruits and vegetables.

With any canned products, it's a good idea to wipe the top of the can before opening, and that just clears any bacteria. With your meats, you want to make sure that those are cooked until well done. And, any perishable food, you don't want to leave out for more than two hours at room temperature. If temperatures are above 90 degrees Fahrenheit, you'll want to follow a one-hour rule.

**HOST:**

Can patients eat out or get fast food after a stem cell transplant?

**LEUKENGA:**

It's best to ask your doctor when it will be safe to eat out or have takeout foods. Once you have been given clearance, you really want to go to clean restaurants. Avoid any self-serve areas such as salad bars, potlucks, sidewalk vendors, and delicatessens or buffet-style dining.

Continue to avoid the same foods in the restaurant that you would at home. And, don't take leftovers home unless you'll be going promptly home to put them in the fridge. Just like leaving them in the car, it can grow bacteria.

**HOST:**

Okay, so let's go through some food groups and talk about what is generally safe and not safe for people with a low white blood cell count or weakened immune system.

What about milk?

**LEUKENGA:**

All milk should be pasteurized. Unpasteurized milk puts you at risk for food-related infection. Most yogurt is pasteurized and is safe to eat. As far as cheese goes, you want to avoid any cheese with blue mold, peppers, or other seasonings. Also avoid Mexican cheese and aged cheeses.

**HOST:**

Meat?

**LEUKENGA:**

Meat should be cooked until well-done. It's best to get a food thermometer and check for proper temperatures. And, some of these temperatures:

Poultry you want to cook to 180 degrees Fahrenheit.  
Red meat should be cooked to 165 degrees Fahrenheit.  
Pork to 170.  
And, fish to 160.

**HOST:**

Eggs?

**LEUKENGA:**

Never eat raw or undercooked eggs. You want to use pasteurized eggs instead of the raw eggs if you are making Caesar salad dressing, homemade ice cream, or a mayonnaise because they are further processed.

And make sure that when you're cooking eggs that you cook them thoroughly. The yolk and white should be firm and not runny.

**HOST:**

What about nuts?

**LEUKENGA:**

No raw nuts are allowed on this diet, but roasted nuts are safe to eat.

**HOST:**

Fruits?

**LEUKENGA:**

All fresh fruit should be well washed and easily cleaned. It's best to avoid difficult-to-clean fruits such as grapes, berries, and pineapple. Easier-to-clean fruits such as



apples, bananas, and oranges are good to use because you can easily wash them with water and a brush.

Make sure that you don't purchase any pre-cut fruit from the grocery store because you can't ensure that food safety practices have been followed.

**HOST:**

Are canned fruits better than fresh fruits?

**LEUKENGA:**

If you don't have access to some of the easier-to-clean, canned can be a good resource. Especially when you're looking at some of the hard-to-clean. And just make sure that if you are doing juice that it's pasteurized.

**HOST:**

Okay. What about vegetables?

**LEUKENGA:**

Avoid, likewise, any hard-to-clean vegetables such as lettuce, broccoli, and cauliflower. They're just at higher risk of contamination and it's difficult to clean each leaf, so we do have you avoid those. However, if you do cook these products they are safe to eat.

You want to avoid any vacuum-packaged salads or vegetables. You just can't ensure that they've been thoroughly cleaned. Avoid any commercially-made fresh salsa and choose shelf-stable salsa instead. Avoid any raw sprouts, including alfalfa, clover, and radish.

**HOST:**

And what about grains?

**LEUKENGA:**

With grains you just want to avoid any moldy bread or grains. Anything that's past its expiration date.

**HOST:**

And soups and casseroles?

**LEUKENGA:**

Soups and casseroles are safe to eat as long as you heat them thoroughly. You do want the temperature to reach 165 degrees Fahrenheit.

One other thing to take note of is sometimes we tend to leave leftovers in our refrigerator for too long. More than 72 hours and you really want to start discarding things.

**HOST:**

And desserts?

**LEUKENGA:**

Make sure your desserts are appropriately refrigerated. If you're having a get-together, I think sometimes the dessert gets left out on the counter for a while so those things that need to be put in the fridge just make sure they get there promptly.

**HOST:**

Now, what about things like butter, mayonnaise, salad dressing, cream cheese, and sour cream?

**LEUKENGA:**

A lot of these condiments are egg-based, which puts them at higher risk for food-borne infection. So you really want to make sure that you don't leave them sitting out for more than two hours or for more than one hour if it's more than 90 degrees outside. Also, it's a good idea to just avoid refrigerated cheese-based salad dressings.

**HOST:**

Are there any kinds of foods that we haven't talked about?

**LEUKENGA:**

Yes, there's a couple. We also encourage you to avoid miso products. And, if you do have honey, you really want to make sure that it's pasteurized.

**HOST:**

Okay. Well, chemotherapy can cause certain side effects that end up having an impact on how people eat and may make it a challenge to maintain optimal nutrition.

What do you tell patients who are going through cancer treatment and are experiencing a loss of appetite or don't want to eat because they feel uncomfortable or tired? How can those patients keep up their strength?

**LEUKENGA:**

Well, I think losing your appetite is a common side effect of cancer and its treatment. However, it's just important for patients to realize that good nutrition is



important and can ultimately help them to feel better, have better energy and strength, and can help maintain their weight.

So we recommend that patients have five to six small meals per day instead of three larger meals. Some people may benefit from liquid meal replacements, and a dietician or a doctor can help recommend which one would be best or provide samples.

It's also important to focus on high-calorie and high-protein foods. That can help with energy a lot. Also, you can talk with your doctor about medications to help to decrease nausea and stimulate appetite.

**HOST:**

Some patients going through cancer treatment experience changes in the way food tastes. High-protein foods can start to taste bitter or metallic and some foods will have less taste. Do you have any tips for dealing with this?

**LEUKENGA:**

Yes. Some patients have found that if they keep a clean mouth it helps. They may have a poor taste in their mouth, so anything they eat will have that same taste. So you may try cleaning your mouth out before you're eating or even sucking on sugar-free mints throughout the day to get a better taste.

It's a good idea to experiment with different foods and flavors. Some patients will find they like sweet foods over tart foods or vice versa. So really focus on using more seasonings and herbs for the taste that you do prefer.

**HOST:**

We know that nausea and vomiting can be an issue for those going through treatment. If patients are having these kinds of problems, what can they do to avoid feeling so queasy?

**LEUKENGA:**

One thing that patients don't realize is that the odor of foods can significantly affect their feelings of nausea. So you want to avoid or limit foods with strong odors, leave the room if food is being prepared, and try eating food after it's cooled off or at room temperature to decrease odors. If you are drinking something, you can put a lid and put a straw in it, and that way you won't have the smell.

Dry, bland foods often help to calm peoples' stomachs, so toast and crackers. You really want to limit any fried or spicy foods at this time. It's also helpful to eat meals slowly, and try relaxing after meals such as loosening your clothes, going outside and getting fresh air, but not lying down because that can increase nausea.

And, as I mentioned before, you can talk with the doctor about medication to decrease nausea.

**HOST:**

Another side effect of chemotherapy can be mouth sores, and mouth sores have a big impact on how much and how well someone can eat. What can patients with mouth sores do?

**LEUKENGA:**

We encourage patients to drink plenty of liquids and you can drink those through a straw to bypass an irritated mouth. You will want to choose soft, moist foods. You can add extra gravy [or] cream sauces to meals to make them softer. Cook foods a little longer than you usually would to get them soft. Some patients prefer cold food to soothe a sore mouth or throat.

It's good to avoid irritating foods, such as citrus foods and juice, spicy or salty foods, and any rough, coarse, or dry foods.

**HOST:**

Many patients with multiple myeloma will at some time or another likely experience diarrhea, and I've heard that some patients actually resort to not eating during this time just to avoid having diarrhea. Can you give some tips for coping with and controlling the diarrhea?

**LEUKENGA:**

Yes, and we do recommend that you continue to try to eat well and to drink plenty of fluids. It is easy for patients to just avoid eating to avoid the diarrhea, but there are some foods that can actually help to decrease diarrhea. For example, bananas, rice, applesauce, potatoes without the skin, white pasta and white toast can help to thicken stool. So that's one thing.

Also make sure you drink plenty of fluids. You lose a lot of fluids when you have diarrhea, so you want to be replacing those and, contrary to what people think, the extra fluid doesn't actually add to the diarrhea. You may want to limit things like juice, as that might contribute.

Also watch the overall amount of fiber that you take, and temporarily you may want to move to white, refined products over whole grain alternatives.

**HOST:**

And what about constipation? That can be another side effect of chemotherapy.

**LEUKENGA:**

For constipation, you'll want to eat plenty of high-fiber foods. Whole grains, fruits, and vegetables are all good sources of fiber, so it's good to eat at least five servings of fruits and vegetables per day.



Make sure you drink plenty of liquids, and juice, for constipation, can help. Especially prune juice or just prunes will help to move peoples' bowels along. Taking walks or exercising regularly can help. And, you can also talk with your doctor about any stool softeners or fiber supplements, but we do recommend you talk with your doctor before starting those.

**HOST:**

Okay, well thank you for that information. Are there any books or websites dealing with nutrition for cancer patients that you can recommend?

**LEUKENGA:**

The first place that I would recommend would be the Cancer Learning Center here at Huntsman Cancer Institute. You can access that online by going to the HCI homepage [[huntsmancancer.org](http://huntsmancancer.org)] and searching for "cancer learning center." Or, you can come here, and we have cookbooks and different nutrition references that you can check out.

There's a great booklet called *Eating Hints*, and it's produced by the National Cancer Institute. You can pick that up here at the Cancer Learning Center, or it's available at [cancer.gov](http://cancer.gov).

One other site that I like is the American Institute for Cancer Research. They have great recipes and question-and-answer on nutrition topics, and you can access that at [aicr.org](http://aicr.org).

**HOST:**

Okay, well thanks again for your advice and insight.

**LEUKENGA:**

It's my pleasure. Thank you.