



Eating for Energy: Managing MS Symptoms Through Nutrition

Presented by:
Ashley Carter, MS, RD, LDN

Kimberlee Baugh

Hi, everyone, and thank you for joining MSAA's live webinar, Eating for Energy: Managing MS Symptoms Through Nutrition. Living with MS can make fatigue and daily symptom management challenging. Today, with dietitian Ashley Carter, we'll focus on how simple nutrition strategies can help support your energy, reduce inflammation, and improve overall well-being.

My name is Kimberlee Baugh, Manager of Health Education and Equity at MSAA, and I'll be your host for this evening. At MSAA, we are dedicated to improving lives today through vital services and compassionate support. Our services include our national toll-free helpline, an MRI access program, equipment and cooling distribution programs, educational resources, publications, digital tools, and opportunities for community engagement. To learn more about our programs and services, please visit mymsaa.org.

Please stay connected with MSAA and receive updates about our programs and events and ways to support the MS community by signing up for e-mail and text message updates. You can also follow us on social media to stay informed and engaged. During tonight's program, you're welcome to submit your questions anytime using the Q&A feature. Closed captions are available for this session.

Today's webinar is being recorded and will be available on demand in a few weeks via MSAA's video library. At the end of the program, please take a moment to complete the brief survey. Your feedback is very important and helps us improve future programs. As a friendly reminder, this program is for informational and educational purposes only and does not constitute formal recommendations. Please speak with your doctor about specific questions or concerns.

And now, please join me in welcoming our guest speaker, Ashley Carter. Ashley is a registered dietitian, educator, and public health advocate with more than a decade of experience helping individuals and communities improve their health through practical, culturally relevant nutrition strategies.

She is the co-founder and executive director of EatWell Exchange, a nonprofit organization dedicated to reducing nutrition-related health disparities through nutrition education, culinary programs, and food access initiatives. Through her work with patients, students, and

communities across the country, Ashley helps individuals navigate nutrition challenges with evidence-based guidance that is both accessible and culturally meaningful.

Ashley, we are so, so grateful to have you here to guide tonight's discussion. And with that, I'll let you take it away.

Ashley Carter

Thank you. Hello, everybody. So happy to be here with you all today. We're going to have a great conversation. I'm excited to present to you and just share more about how you can eat for energy with MS. Just to confirm everyone can see my screen okay. All right, so let's get started.

Well, first, before we get into our topic, I want to introduce myself. So, my name is Ashley Carter. I have my Master's of Science in Dietetics. I'm an international speaker, so I do presentations all throughout the United States and also abroad as well. I'm a published author. I wrote a children's book called Enoch's Little Lunch highlighting cultural food and just trying new foods as well, and I'm a registered dietitian, so I specialize in meeting people where they are and taking nutrition advice and making it into a practical format.

I'm also a nonprofit co-founder. I am one of the co-founders of EatWell Exchange, which I'll tell you more about soon. I'm a nutrition professor. I teach Science of Nutrition at FAMU, and I have my master's in nutrition from UNF, and I did my undergraduate degree at Florida State University.

A little bit more about EatWell Exchange. We're a 501(c)3 nonprofit. We teach people how to eat healthy, focusing on cultural foods. So, taking all the foods you grew up eating and showing you how those foods can be a part of a healthy diet. We focus on creating a sustainable change in lower socioeconomic communities and we teach professionals how to make small, obtainable changes for their clients and themselves.

We've been in operation since 2017 and we've taught over 72,000 people. So now let's get into our programs. And I'll just run through this briefly, but of course, if you want more information, please feel free to go to our social media, which is EatWell Exchange or our website to get more detailed information. We provide food access programs like free farmers markets where you can get free produce. We have gardening classes as well where we teach you how to grow your own foods, and also we do recipes and demos for pantries to highlight how the foods that are received at pantries can be used more often.

We provide nutrition education. Of course, I'm a dietitian, but everything that we do has a layer of nutrition education to it. We provide interactive classes in the community, we do trainings for companies when it comes to cultural competency, we do tabling events as well and provide information for healthcare professionals, chefs, and also employee wellness activities as well.

And our last pillar, which is culinary programs. Some may say it's the most fun, but we have kids culinary classes, cooking demos, family classes, so where parents and kids can cook together as well. We offer classes in English, Spanish, and also Haitian Creole. And we do men's health classes, prenatal classes, and senior culinary classes. So, we reach every demographic and teach about nutrition, wellness, and a hands-on approach. And also, the food tastes really, really good.

So now let's talk about MS. What is multiple sclerosis? If you're in the chat, you can comment if you have ever heard of MS, if today's your first day learning about MS, or if you have a family member that's impacted by MS and you want to learn more about it.

MS is an autoimmune disease. It damages the protective covering of the nerves in the brain and the spinal cord. This damage is going to disrupt communication between the brain and the rest of the body. With that being said, there's technically no cure, but there is effective disease modifying therapies. And I stress that because there's a lot that you can do. There's so much that can be done to help when it comes to comprehensive symptom management and strategies that are available.

Thank you everyone in this chat that's sharing with us. And a lot of you will see that you're not alone. I see a lot of the years that you're sharing is similar to others, and I see a lot of people are supporting others in this chat too. It's so important that whether you have been diagnosed with MS, or you have a family member with MS, or a friend, that you're learning this information today that's going to help you navigate.

Combined with regular exercise and a healthy diet, we can talk about approaches that can help slow the disease progression and also help you maintain an independent quality of life. Yes, and I see all the warriors chiming in. I saw some MS warriors. Wow. So, if you look at the picture on the right, it shows you the difference between a normal nerve and an effective nerve when it comes to MS.

Okay, so now let's talk about fatigue. Today's presentation is all about foods that can help improve fatigue and improve tiredness when it comes to MS. So why are you tired with MS? Someone without the condition may not understand. They may just say, "Oh, well, take a nap." They may say, "Oh, well, why don't you just rest a little bit?" No, it's deeper than that. Fatigue affects actually 80% of people that have MS. Yes, so it affects 80% of the people that have MS. And it's just different from being tired like we feel after a long day. Many people describe it as an overwhelming lack of physical and mental energy. So just a chronic fatigue that isn't relieved by rest alone.

So, with that being said, let's talk about why this happens. So, number one, there's damaged nerve cells like I showed you in the last slide. With that being said, with the MS damaging that myelin sheath, the brain is using more energy to send signals throughout your body. So, think about that. Your brain has to work very hard to get signals throughout your body.

A good analogy is if you're driving somewhere. If you're driving around the highway from point A to point B, that does take some energy or some gas. But now what if there's detours? If there's detours, now you have to think a little bit more. You have to navigate a little bit further and drive further, meaning you're using more energy or more gas when there's those detours. So, I want you to think about the myelin sheath like that, that once you have those interruptions and damages, it's going to cause some detours, which is going to cause your brain to use a little bit more energy.

Then also there's inflammation. Inflammation is when the immune system responds to release these inflammatory chemicals and that can lead to fog, to brain fog, and also fatigue. And then next, poor sleep. If you're not sleeping well because you're feeling pain, muscle spasms, having issues with your bladder and also a sleep disorder, this is going to reduce your quality of sleep, which in turn will cause you to feel more fatigue.

Then, increased physical effort. If you have weak muscles, if you have any kind of disability, or are not able to move around as much, it is going to take more energy to do day-to-day tasks. And also heat sensitivity. So, even small increases in body temperature can temporarily worsen fatigue and other MS symptoms.

So I set the scene by letting you know that when it comes to fatigue, it's not something that you can just push through easily. It's something that is very challenging, and that's why we're doing this presentation today, to let you know that you're not alone and that there's tools that you can use to navigate through.

Now let's talk about food. I'm a dietitian so I love to talk about food. When it comes to food that supports your energy, I do want you to know that while this presentation is geared towards MS, your family, your friends, all of you can eat this way as well. This is not an MS diet. This is foods that can help you, but this is also foods that can help anyone that wants a little bit more energy and wants to eat more balance. So that doesn't mean you have to eat separate from your family. You and your family can eat one meal together.

The first thing is carbohydrates. Carbohydrates are our body's main source of fuel. Sometimes people give carbs a bad name and say you shouldn't eat carbohydrates, but there's different types of carbs. So, we have our whole grains, which is the type of carbohydrates that are found in bread, and whole wheat bread, and brown rice, and grains. This is going to provide steady energy to fuel the body. Compare it to a can of soda or a juice, it's going to give you a little jolt of energy, or coffee, but that energy is not sustainable. So, we want to stick more to whole grains for our carbohydrates.

And then also lean protein. So, this is going to support our muscle repair and help maintain energy. Protein gives us more of a consistent energy source compared to carbohydrates, which give us that steady energy or that quick jolt of energy as well.

And then healthy fats. So, we want to provide long-lasting fuel to support the brain health. Also fats can help with anti-inflammatory properties as well when we're eating healthy fats in our diet.

And then let's throw some color in there. Fruits and vegetables add lots of colors to our plate, but they also provide quick energy and nutrients for our fruit. And then veggies are going to support energy production as well. So, they have lots of compounds in them and lots of vitamins and minerals that are going to help with a lot of different body processes.

So now let's go into detail for some foods that fuel you. Let's think about carbohydrates. Some examples would be oats, brown rice, quinoa, whole wheat bread. And then for protein, think about your favorite sources of protein. That could be chicken, turkey, beans, or fish. Also, when it comes to fruits, we have bananas, apples, and berries.

There's a good variety of foods, so you don't have to feel boxed in to only eat chicken and avocados every day. You can eat a good range of food and as you see on that plate, we want to eat the rainbow where we're getting a good variety of food every single day and constantly changing foods up to be more interesting and fun.

So overall, when it comes to maintaining energy, what we want to do, let's start off by eating a balanced meal. So, eating our balanced meal is going to give us the carbohydrates, the protein, the fiber, the fat that we need. But it doesn't stop there.

We have to eat regularly. So, when it comes to eating a balanced meal, if you start with breakfast in maybe two or three hours, you should eat a snack or a small lunch. And then staying hydrated. So, when it comes to staying hydrated, that is going to be so important to drink water throughout the day and also to stay away from dehydrating foods like energy drinks, caffeine, sugary sodas. They cause you to be dehydrated. So, it is important to make sure that you're staying hydrated with water throughout the day.

And then prioritizing sleep and recovery. I'll give you some tips on that in a little bit and also exercise and energy supporting foods. So, we'll cover all of these topics throughout the presentation. All right.

When it comes to eating a balanced plate, half of every plate should be fruits and vegetables. So, think about that. If you have a big plate, make half of it fruits and veggies. The other half is going to be divided between whole grains and lean protein. So, with that being said, there's so many foods for us to try. If you don't like broccoli, it's okay. You can probably eat spinach. If you don't like sweet potatoes, it's fine. You can eat carrots.

So pretty much finding fruits and vegetables that you enjoy, and eating those foods more often. So, this is a standard meal plate and also you can lean more into the plant-based foods as well because they're leaner and also they're going to have lots of anti-inflammatory properties that's going to help when it comes to our brain and also our nervous system.

So, this information sounds great, but now let's put it into practice. So, I have a lot of different foods on the screen. I'm going to call out some of them and you can tell me what food group it belongs to whether it's whole grains, lean protein, or fruits and vegetables. And if it has multiple, you can let me know that as well.

So, let's start off with our broccoli. Where would that fall under? You can comment in the chat. Where would broccoli fall under? And I do see someone mentioned that they can't see other people. Make sure you change your chat to everyone, and then you'll be able to see everyone's message. All right. Veggies, veggies, veggies. Good job, everybody. That is the correct answer. Started off a little easy for you. Broccoli is a vegetable, so that will be under the 50%, which is half of your plate should be a vegetable, and it could be broccoli.

All right. Now let's make this a little bit more challenging. What about that sandwich? What about the sandwich? Would the sandwich be a whole grain? Would it be protein or would it be fruits and veggies? Okay, I see whole grains. I see protein. I see carbs. Somebody said, oh, okay, good job. Somebody else in it as well. All three. Yes.

So, I want you to think about meals like that. It's not all or nothing. If you eat a sandwich that has whole grain bread, that's going to be your whole grain. If it has meat, that's going to be your protein. Or even if it has a plant-based source, like maybe chickpeas, if it's a chickpea tuna, that would be your protein. And then your fruits and veggies top it off. So that can be your lettuce, your tomatoes, onions, peppers. So that's just an example.

And now the last one, the soup. Where would that fall under? All right. All, yes. Someone said all with a question mark. They're like, is this the same answer? But yes, I want you to see that our foods are complex. So it's not all or nothing. Sometimes the foods you eat have multiple food groups in them, and that's actually what's recommended, to have a good variety of food groups.

All right, and the last one, let's do the egg. What came first, the chicken or the egg? So yes, the egg is protein. Very good. So, for some people that are having difficulties eating in the morning, if you like boiled eggs, that can be an easy option because you can make them a day or two before and eat them and just have your boiled eggs ready for you. And you can also pair that with some avocados that you see there as well just to make a nice balanced meal.

And a meal does not have to be a full breakfast spread. It could just be a couple of items that make up your whole grains, your lean protein, your fruits and vegetables. Thank you all for participating. I will be calling on you throughout so stay close to your chat. And I do see the question about gluten. We'll definitely address that towards the end.

All right, so here's what we recommend for you to do. Eat regularly. Small plates are important for controlling portion size. So remember, you do not have to eat a large spread of food. You can eat small portions, but you just want it to be a balanced meal with your carbohydrates, your fruits and vegetables, and also your protein.

And then you want to eat frequently. If you go long periods between eating, that's going to also impact your energy levels. So, we want to make sure that we're getting nice balanced meals in throughout the day. And then last, we're going to avoid late night eating. So sometimes when we eat late at night, that's going to cause us to eat foods that are not always the best for us. If you do work overnight, it is okay to eat, but you just want to make sure you stop eating a couple of hours before bed to give your body time to properly digest food.

So now when it comes to scheduling, what you should do is plan for energy dips. You know your body better than anybody else. So with that being said, if you notice that your mornings you have the most energy, that's the time that you want to plan tasks that you need to do. Maybe going to the grocery store, maybe cooking a lot of meals for the day. Plan your meals, plan your day around your energy levels.

If you notice in the evenings your energy is very low, that would not be the best time to plan your trips to the grocery store, other things that you need to do. So, know your body and plan accordingly.

And then also vitamin D. Vitamin D deficiency is connected to a worsening of a lot of symptoms of MS and a lot of other medical conditions. So with that being said, you want to time vitamin D throughout the day. If you're wondering where you get vitamin D, you get vitamin D from foods like salmon, from mushrooms, from mackerel, sardines, and also green leafy vegetables. So that's some sources of vitamin D. It'll be perfect to spread that out throughout the day.

And if possible, write a weekly meal plan. What I personally do is go through my refrigerator, pantry, and my freezer and see what I have. And then based off of what I have, I find items that I can buy to make a complete meal. This saves a lot of money because it stops you from re-buying the same foods. And also, if it saves time, cut up fresh fruits and veggies in advance. So, if you have more time on a Saturday, maybe you can chop up some vegetables, put them into the Tupperware containers, and that way throughout the week you can make quick, easy meals.

All right, so I want to hear from you again. If you can only choose three habits to improve your health tomorrow, which three would it be? And actually, yeah, you can just share one with me.

From what we talked about so far, what's one habit that you can start doing tomorrow to improve your health? Okay, I see someone in the chat said to drink more water, exercise. Good. Eat breakfast, eating. A lot of people saying eating more often. Thank you for everyone answering. I'm still seeing your answers.

And the reason why I ask this is because sometimes we get overwhelmed. There's so much information, there's so much you need to do. And sometimes you have family members and friends that call you and say, "Oh, have you tried this supplement? Have you done this?" And that may be great they want to help you, but at the end of the day, it becomes very overwhelming.

So just think about one thing you can do and focus on that one thing this week. And then next week, find another thing you can do. And that's so important that we're starting small. I see someone said to stop eating late, to exercise, to cut back on chocolate, I guess. Yes, so you all are getting it. So just think about one thing you can do and that can be your focus for this week. Very good. Thank you all for answering in the chat.

So now let's talk more about hydration. So mild dehydration can worsen the symptoms of MS, so we want to start drinking. And let's think about it. Our brain and our body is primarily made-up of water. So just a little bit of dehydration is going to impact how our body functions and how our body is able to process the food that we're eating and also impacting our skeletal functions as well. So, let's aim to drink 6 to 8 cups of water or more.

Everybody's energy intake and everybody's water intake is different based off of your body composition, your energy levels as well, and also your overall energy expenditure, which is how much you move or exercise. So, adjust accordingly. If you need more water, it's okay. And also if you drink less water, that's fine too, but you just want to make sure you're drinking enough for your body. An easy tip is to carry a reusable water bottle. So, with that being said, if you're carrying a bottle around with you, you're more likely to refill it and drink water compared to if you have to purchase a water bottle while you're out.

And you don't have to rely on water alone. You can eat water rich foods. So, cucumbers, tomatoes, all those foods that when you bite into it, there's a big burst of water. Those foods are very hydrating. And I see someone in the chat mentioned coffee. So, you don't have to avoid coffee completely, but I would decrease if possible. The reason why is because coffee has caffeine and caffeine may cause you to feel very tired. And I know this conversation is about fatigue. So, if you're really tired, you're probably using that coffee to help get you through the day. So again, you don't have to take it away completely but try to decrease it because caffeine also is a stimulant, so sometimes it makes it harder to go to bed which causes a vicious cycle.

So, something like green tea has caffeine but it may be easier on you or even other teas like ginger tea may be great for you in the morning because it doesn't have caffeine but it helps to wake you up.

If you're sensitive to heat, it is okay to drink cold water and also sip water throughout the day. You don't want to drink all 60 ounces of water in the morning. You want to start off slow, drink water throughout the day, and again build. Right now, if you're only drinking one bottle of water, make it a goal to drink two bottles of water and that will be a slow and steady increase in the right direction.

And again, I do want to preface everything that we're saying by- remember you are an individual. So, when it comes to any condition, yes, there's some things that are standard, but remember you're an individual person. So with that being said, you may have individual needs different from someone next to you, and that's completely fine.

So let's talk about inflammation. So inflammation is pretty much our body becomes inflamed when we have a cold. Our body becomes inflamed if we get an injury. So inflammation is not a bad thing. But chronic inflammation, which means we're inflamed for long periods of time, is not the best for our body. So we want to eat foods that are anti-inflammatory, which means they decrease inflammation in our body.

So that would be fatty fish like sardines, tuna and salmon, fruits and veggies like berries and leafy greens, nuts and seeds, olive oils and avocado oil, and also whole grains. And I know right now we're in the middle of an outbreak of cyclosporiasis. So, with that being said, take the necessary precautions, stay abreast to what is going on in the news. But I don't want that to discourage you from eating your fruits and vegetables. So try to find the sources that you can eat, the sources that are safe and always stay up to date with the newest information that's coming out. But that doesn't mean to stop eating vegetables.

All right. So inflammatory foods on the other end are the ones we want to avoid. So, sugary foods. That can be processed cakes like the little cakes, the shelf stable cakes, and drinks. Also fried foods. So, fried foods are going to increase inflammatory markers. Saturated fat, which is the fat that's found in most animal products, and also processed meats as well. So processed meats would be like your hot dogs, your sandwich meats. All of those meats are going to increase inflammatory markers and also excessive alcohol intake. So, alcohol leads to inflammation, so we definitely want to keep that down.

And I see someone in the chat mention all the yummy stuff, but don't get me wrong. It is possible to eat the foods you enjoy. It's all about finding balance. So, if you like chocolate, like someone mentioned, or chocolate cake, you don't eat chocolate cake every day. You want to eat it less often. And when you do eat it, eat smaller portions and pair it with something that's healthy for you, like raspberries. So, if you have raspberries on the side of your chocolate cake, that's a great way to add some fiber to a food that is typically high in sugar. I'm not taking anything away from you. It's just learning how to balance everything out.

So, there's a lot of different dietary approaches. Here's some that we're going to focus on today. So, there's a Mediterranean diet, which is the most well-studied diet. It has lots of plant-based eating patterns, and also it focuses on healthy fats. There's a DASH diet, which is designed to help stop hypertension, and this diet emphasizes more fruits and vegetables and whole grains. And also the healthy eating plate which is making half of every plate fruits and vegetables. Again, there's no single diet that's proven to cure or treat MS, but these different dietary patterns can be beneficial for you.

And I also want you to notice that there's lots of repetition in this. So, that means you don't have to just focus on foods of vitamin D and then foods that are anti-inflammatory. A lot of them are the same. So, with that being said, your grocery list doesn't have to be too long with you getting all of these different foods. A lot of these foods we mentioned are beneficial for more than one factor. I hope that gives you some peace of mind to know you don't have to buy too many different foods.

Here's a sample meal. So, when it comes to breakfast, you can do something simple like oatmeal with berries, walnuts, and chia seeds. The chia seeds have omega-3 fatty acids, which are anti-inflammatory. And then also having a snack. It could be apples and peanut butter. For lunch, you can have grilled chicken, a quinoa salad with brown rice mixed in and also some mixed veggies.

And also, if these foods do not look like the foods you like to eat, maybe you like to eat collard greens, you can swap that out for any other vegetable like broccoli. If you don't like to eat salmon, but instead you like to eat another source of fish like maybe a yellowtail or a red snapper. That's okay too.

So, you don't have to feel like you need to fit into a dietary pattern. Take the foods you like and swap them out so that we have a balanced diet with half your plate being fruits or vegetables.

All right, I just gave you some examples, but I want to hear from you. When you walk away from this presentation today, I want to know that you know how to build your own balanced plate.

So, comment in the chat. Tell me your protein source. Tell me a carbohydrate, and also a veggie that you can use for a balanced meal. And remember, think about foods you like. Think about foods you grew up eating. Think about foods that make you happy. And comment in the chat so we can share those foods with each other. And you can put it all in one line. You can say whether it's eggs... okay, so I see mackerel, basmati rice, broccoli. Very good. Salmon, brussels sprouts, and rice. A Cobb salad, chicken. Okay. All right, very good.

And I see someone said they're trying to do more veggies and protein. Vegetables have carbohydrates too, so that's still going to be beneficial for you. All right. Good job. Chicken and lima beans. Good. So, you all are really applying this to your real life, and that's what matters because attending this talk is incredible. You showed up for yourself. But I want to make sure that you know how to apply these foods and apply this to your daily life. So, thank you all in the chat for sharing your foods. And I'm getting some good food ideas from there too. So, please take a look at this chat and get some ideas from our other participants that are in here with us today.

So now let's talk about exercise. So, exercising is moving our body in whichever way you can. That could be sitting down. If you're in a wheelchair, that can be using a resistance band as you see in the bottom right to pull a resistance band. If you're able to stand up and stretch, you can stretch throughout the day. If you know how to swim, you can swim. You can do yoga. You can do any kind of movement that'll help. One of my favorite types of movement is dancing. You don't need a gym membership. All you need is some good music, and you can dance in the mirror for 30 minutes, and that can count as a form of exercise.

So, with that being said, there are no limits. Whatever you can do, find a way to do that every single day if possible. 30 minutes of exercise is recommended five days a week. And again, this exercise is going to help to fight fatigue. Exercising sometimes, it may seem a little hard when you're tired, but it is going to give you a jolt of energy. Exercising does help with the positive hormones like the oxytocin that's going to flow throughout your body to help you feel better. It's also going to help reducing spasms the more that you move and help increase your circulation. And it's going to help with your cardiovascular health, that's your heart health.

So again, the more we move, the more it's going to help to improve our mobility, strength, and balance. But again, remember where you are. Remember where you are in your life right now and the movement you can do. If you're in a wheelchair and you're not able to get up and dance, maybe just throw your arms around and find a way to dance like that. It still counts. And even for me right now, just putting my arms up, it made me smile.

So, you can see that movement really does add a lot of energy and fun to your day. So, try to find something you can do, maybe tonight before bed for 30 minutes, that you can do just to get your body moving and make it fun, make it enjoyable, and make it something that you look forward to every day.

There's lots of different exercises. So again, you can do some strength training, balance exercises, but most importantly, you start off slow. If you're not exercising right now, you don't want to get up and run a marathon tomorrow. Instead, start off slowly by walking for about 10 minutes and slowly increase your activity levels as you can and also give yourself grace.

Every day is different. So tomorrow you're able to run and move a lot, but the next day you're very tired and you cannot, it's okay. Do what you can each and every day, and that may look different. So, this shows you different exercises you can do. I know I mentioned a couple of them, but when you have a mild impairment, you can still walk if possible, use a stationary bike. For limited walking ability, you can do seated yoga or dancing. Even boxing with your hands is still a great movement.

Then for wheelchair users, breathing exercises. So deep breathing, engaging your core and upper body strength. And then if you're in a bed or chair bound, you can still do breathing exercises and practicing range of motion. And also, depending on recommendations from your doctor, sometimes electrical muscle stimulation is recommended as well. And thank you.

All of you in the chat are sharing some exercises you like to do. I see tai chi, roller skating, wow. Some of you mentioned dancing too. And I did see someone comment something very real, that this is an unpredictable disease. So again, like I said, hold space for yourself when it comes to the movement you can do every day. It may look different, and that's completely fine.

Now let's talk about sleep. So, when it comes to sleep, these are five steps that can help you have a better sleep. And this doesn't just apply for you. This is your family members as well. So, this is general advice that may be beneficial for anyone when it comes to sleeping. So, the first is to keep your room cool and dark. If your room is very warm, it may be uncomfortable for you to go to sleep, especially if you naturally feel very warm. And then also you want to try to eliminate a lot of light from coming into your room when possible. That way you can get a nice sleep.

You want to maintain a consistent sleep schedule. So, if you notice that one day you go to bed at 8 o'clock, the next day you go to bed at 10, the day after you go to bed at midnight, it's hard for your body to know when to calm down. So, try to have a routine where you get off work at a certain time or you wind down at a certain time, and then you start to get ready for bed. And that way your body knows every day at 10:30, or whatever time it may be, it's time to start relaxing and going to bed.

And then in the morning, get some sunlight. Start your day with sunlight if possible. I know we're all in different regions, but start your day with some sunlight and that helps your body know that it's time to start our day and time to get our internal clock going.

And then four is avoid stimulants. So, like we talked about when it comes to caffeine, that's one of the downfalls. Caffeine, energy drinks, they may give you that pick me up, but then sometimes it's hard for you to relax and lay down. So, try to avoid the stimulants whenever possible.

And then limit screen time before bed. Social media can sometimes really lock us in, but what I encourage you to do is find a routine where you're just not stimulated with your screen. Not only can that blue light from your phone keep you awake, but also you never know what you're going to see. So sometimes the things you may see can upset you. It can make you worried and that can stop your sleep from coming in when it's supposed to. So those are some tips to prioritize your sleep and again, choose one or two and start today. And then keep working as we talk about those other tips that you can do as well.

So, let's go over some 'do's.' So, when it comes to fatigue, some things that we do want to do is eat a balanced meal. When we eat a balanced meal, it's going to help us get the nutrients we need. And can somebody comment in the chat the three parts of a meal that I recommended that we have? Let's see who is paying attention.

All right, the three parts of a meal. So, it was... very good. Protein, veggies, grains. Very, very good. Good job, everybody. And then we want to make sure we have our balanced plate. We want to make sure that we stay hydrated. So, getting enough fluid throughout the day and eating foods that are hydrating as well and avoiding some of those dehydrating foods. And then we want to get proper sleep and proper rest. So just getting a good night's rest, I know that may not take the fatigue away, but it is a great start. And by having that routine schedule like we talked about, that's going to be beneficial for getting to bed on time and staying asleep and getting a nice sound rest. And then exercise. So moving your body the best you can for your ability, whatever that may look like for you. And remember, start small. You don't have to run tomorrow if you don't typically run. A walk is fine. Moving your body, just doing shoulder shrugs if you're in a wheelchair. Something to get your body moving intentionally throughout the day.

And now when it comes to our 'don't's.' We want to avoid foods that are very fried, fatty foods, foods that are high in sugar and high in sodium as well. So, does that mean you can never have french fries again? No, that's not what I'm saying. What I'm saying is these are the foods we want to limit and not have as often.

So that way we're focusing more on those balanced foods that have lots of nutrients and not the foods that have high fat, high sugar that will cause our energy to jolt up and then drop down dramatically. So, when it comes to alcohol, the same thing. We want to avoid alcohol and caffeine as much as possible as there are stimulants. And we want to make sure that we are having a good balanced diet that is going to promote anti-inflammatory properties as well compared to the inflammation that a lot of those foods have. So, if you already had a soda today, don't feel bad. Just remember tomorrow's a new day and every day we're going to work harder towards our healthier self.

Okay. So let me know in the chat. Is this a myth or a fact? There is only one lifestyle change that can effectively manage MS symptoms on its own. So that means we all need to do the same thing. And if you don't do that same thing, you're doing it wrong. Is that true or false?

Everybody saying myth. Good job, good job, good job. All right, everybody, that is the perfect answer. We do not have... we're all different, as I mentioned. So remember, even when it comes to being diagnosed with MS you and the person next to you may have completely different symptoms. You may have completely different areas that you need to work on. So just remember to learn all you can, but still remember that you're an individual. So that being said, you need to tailor and customize everything you learn to your personal life.

And MSAA does have a video library with yoga, movement, and sleep health too, so please explore those resources. And speaking of resources, there's more for you right here. So, here's some resources that you can use. There's a toll-free helpline. So, this is all through MSAA. So please go to MyMSAA.org and you'll find all of these incredible resources for you. The link is also posted directly in the chat, so you're able to just click on that link right away. There's numbers there, there's an e-mail, there's information. So please don't hesitate, whatever way is best for you. When it comes to equipment distribution, when it comes to MRI access, cooling products that can help, all of that is available. So please make sure that you know that you're not in this by yourself. There's lots of resources for you.

And I'm sure a lot of you probably noticed in the chat that there are so many similarities that a lot of us share. So that being said, know that there's resources. Please do not hesitate to reach out to the MSAA staff if there's anything additional that you may need. And please feel free to reach out to me. Again, my name is Ashley Carter. I'm a registered dietitian and one of the co-founders of EatWell Exchange. So, at EatWell, we teach how to eat healthy using cultural foods and foods from all around the world.

So, I do hope you enjoyed this presentation today. Please stay connected with us. We have a Facebook page, a YouTube channel, Instagram, all the things. So please stay connected with us. And it was incredible getting to know you all today in the chat and also presenting this information to you.

Kimberlee Baugh

Thank you so much, Ashley. We are going to keep the learning going because we have a ton of questions coming in through the Q&A. And so just to get this started, first question for you.

“With limited funds and high prices, how can I be certain I'm purchasing real food and not something detrimental to my health?”

Ashley Carter

Oh, that's such a great question. It is challenging right now. A lot of people are dealing with limited funds and also the food prices are going up, it seems, every day. So, with that being said, the main thing that we want to do is focus on as many whole foods as possible. So, by whole foods, I don't mean the store. I mean the actual entire food. So, buying the orange, buying the apple, buying foods that are in their less processed state.

So as an example, you have an apple and then you have applesauce, and then you have fruit snacks that may have an apple flavor. You want to stick to the apples and the applesauce because they're less processed than the foods that are ultra-processed. Don't get me wrong, it doesn't mean you cannot have ultra-processed foods. It doesn't mean that you can't have a granola bar, which is processed.

Those foods can be a part of your diet, but you want to stick to more whole foods as possible because you typically get more nutrients from the actual fruit and vegetable, than you do when it's broken down and processed to a different form.

Kimberlee Baugh

Awesome. Next question for you. "Do you recommend any eating habits and/or meal suggestions when it gets very hot outside, like how it is right now?"

Ashley Carter

Yes. When it's hot, we want to do lots of cooling foods. So you probably want to stay away from even turning your oven on if possible. If you can do more salads, if you can do, I like to do like a watermelon feta salad where I take watermelon, dice it up, add some feta cheese, some balsamic glaze, and sometimes some almonds to it. And that's like a nice refreshing snack. Also, if you like other fruit like mangoes, you can have that as well.

You can also buy frozen fruit. So frozen fruits and vegetables are picked at their peak freshness and they're flash frozen to maintain their nutritional value. So, it is okay to eat frozen vegetables and frozen fruit. And with that being said, I put frozen fruit in my yogurt. And that way it keeps my yogurt cold throughout the day because it's frozen. And also, it's going to keep my body cool as well. And some people snack on frozen fruit too, so that can be another option to get more frozen foods and foods that are cold that you can eat throughout the day.

Kimberlee Baugh

Great, I'm going to try that watermelon recipe.

Ashley Carter

Oh, it's so good.

Kimberlee Baugh

Okay, I got a lot of questions in the chat about being gluten free. "So as an MS patient, should I be gluten free and is there an advantage to eliminating gluten from the diet?"

Ashley Carter

Okay. So, when it comes to MS there's no recommendation for gluten-free when it comes to MS. So that being said, there's no research that has shown that being gluten-free is going to slow the progression of MS or reduce relapses. But remember, as I mentioned before, you're all still individual people.

So that being said, if you have celiac disease or if you've been diagnosed with a gluten sensitivity, then it's best to avoid gluten or to decrease gluten in your diet to make sure that is not something that's impacting you. And some people have gluten sensitivities and have not been diagnosed. So that's something I would definitely mention to get tested for gluten to see if that's something that is impacting you.

But I will say that over the last couple of years, it has become more of a trend for a lot of people to decrease gluten. So, make sure that it's something that's impacting you because when you take away gluten from your diet, it takes away a lot of other foods that you could be eating, like a lot of the whole grain breads and a lot of the carbohydrates that you need.

So, make sure it's something that you need before removing it. That way you're not just removing foods from your diet for no reason.

Kimberlee Baugh

Got it. Okay. So Tanya asks, "How do we fuel up for exercise when we feel so tired?"

Ashley Carter

Yes, so when it comes to fueling up for exercise, the most important thing to remember is that we need carbohydrates. So, carbohydrates are the basic building blocks when it comes to our energy sources. So, if we do not have carbohydrates like your bread, rice, pasta, tortillas, we're not going to have energy for our workouts.

So, you want to have more simple carbohydrates before working out and then more complex carbohydrates after, to replace. So with that being said, I know I'm throwing out big words about carbohydrates, but what I want you to think about is Greek yogurt with berries. So that yogurt is going to have protein and then the berries will be your carbohydrates.

Also peanut butter. If you like peanut butter and a whole grain toast, that toast is going to be your carbohydrate, the peanut butter is going to be your protein. So, you want to pair protein with a simple carbohydrate to help give you the energy that you need. And also, you want to eat about 30 minutes or more before your exercise so that way you don't receive any cramping or any indigestion.

Kimberlee Baugh

Got it. Well, we have a couple picky eaters in the chat. So what if you don't like a variety of foods? For instance, we have an attendee that said, "I can't stomach leafy greens. I just don't like them. And there's actually a lot I don't like. Do you have any other suggestions, any replacements for leafy greens? Because we know that that's a big part of a healthy diet."

Ashley Carter

Yes, and I'm glad that you mentioned that because everyone is not going to like everything and that is okay.

What I recommend doing is taking the color of something you don't like and finding something else of that similar color. The reason why is because the color of a fruit or vegetable is what helps determine its nutrients. So with that being said, everything red has a compound called lycopene, which is good for our heart.

So if you don't like apples, it's okay, eat cherries, eat something else that is red like raspberries. So, find another food that's the same color.

So if you don't like leafy greens, maybe you can eat broccoli, maybe you can eat bell peppers, maybe you can eat zucchini, brussels sprouts. You can just find something else. What I want you to also do for everyone on this chat is don't focus on what you don't like as much.

Focus on what you do like. So, think about what you like. Do you like okra? If you like okra, that can be your vegetable. And now find meals that you can pair. Find the different carbohydrates you can add. Find the protein sources.

And even I'll tell you for one of my family members, she's very picky. So, I told her, write a list. Write a list of everything that you like down. And then from there, categorize what is a protein, what is a carbohydrate, what is your fruits and vegetables, and then she can just mix and

match and make some meals. Because sometimes we don't realize how much we like because we're thinking about what we don't like.

So, I hope that resonated with all of my picky eaters in the chat today, that it is possible for you to build some meals with foods you like and also try foods a different way. You may not like avocados, but try to add some lime to it, add some tajin. Do something like that and see if it's a great way to get you to like it.

Kimberlee Baugh

I love that. 10 out of 10 avocado with Tajin. Very good. 10 out of 10 recommendation. Yes.

So I have Tina in the chat. She said, "I have MS and also high cholesterol. Would you recommend any diet changes?"

What are some recommendations for her?

Ashley Carter

If you have high cholesterol, the main thing that you want to do is decrease foods that are providing cholesterol, and I'll explain. So, cholesterol is naturally found in animals, including ourselves as humans. Our body creates cholesterol. It's a precursor for different functions in our body. So, every animal that we eat or every animal product is going to have cholesterol in it. So, the more animals you eat, the more cholesterol you get, in the simplest term.

So, when we have foods of fiber, like fruits, veggies, and whole grains, that's going to decrease our cholesterol. So, let's think back to the plate that we showed. What I recommend for MS is the same that's going to help with your cholesterol. So, you don't have to choose which dietary pattern is better because what I recommend is going to be beneficial for both, okay?

Same for diabetes. And if you have diabetes or have high blood sugar, what I recommended today is going to be beneficial for that as well because it's a balanced diet.

Kimberlee Baugh

Gotcha. We're going to get a couple of more questions in. What are a few snack recommendations to help with energy, that are high in protein?

Ashley Carter

Ooh, that's good. Okay, so high protein snacks. If you like cottage cheese, cottage cheese is a good snack. And if you don't like cottage cheese, I can find ways for you to like it. A lot of times we just don't dress it up enough. So, if you want it to be more sweet, you can drizzle some honey, put some sliced almonds on top. If you want to do more like a savory cottage cheese bowl, you can add pickled onions to it. You can add olives and kind of make it more of like a Mediterranean style dish. I see somebody in here put cottage cheese pancakes. That's perfect.

Outside of cottage cheese, there's also sardines. There's the canned fish, like sardines and tuna can be a great snack as well. Build it up just like I showed you with the plate. So, if you have your sardines, maybe you can take some toast or some flatbread. Add some healthy fat to that. You could add something like avocados, your sardines, and the toast, and then season it up with maybe some lemon pepper. Or you can add some smoked paprika to add a nice smokiness to it. Or you want to add a drizzle of oil on top to add a nice healthy fat.

So, I have a ton of recipes. I can do this all day. But the most important thing to do is start with something you like. Build it up. Add your carbohydrates. Add your protein. Add that healthy fat to it, and then add some flavor. So, whether that's lemon pepper, smoked paprika, I mentioned Tajin if you want to add a little bit of spice or chili peppers to something. Always find ways to make it fun because that's what motivates you to eat and helps you feel hungry on those days where you don't feel like eating that much.

Kimberlee Baugh

Love it. A lot of our folks struggle with constipation. That's a common symptom of MS. So what are some foods that kind of help combat constipation?

Ashley Carter

Yes. So, for constipation, some fruits and vegetables help. And just to kind of back up a little bit, constipation happens for a lot of different reasons. Some medication that you're taking could be causing constipation. That doesn't mean to stop taking the medication. It just means to know that that is a connection to what's happening.

So pretty much when it comes to constipation, the three things that typically help is movement, so that's being able to move your body and exercise, fiber-rich foods, so that's your fruits, veggies, and grains, and then also that's hydration. Again, all the points that we talked about today. So just trying to increase your water intake is going to help because you need to be able to create a solid stool, which is that bowel movement that you're having, and you create that stool or bowel movement by creating bulk, which is fiber.

So, our body doesn't store fiber, so as we eat foods that have fiber, it collects cholesterol, and then we release it when we go to the bathroom. But the issue is if you're not eating enough fiber, it kind of just hangs out in our digestive tract, and that's what makes it become very, very hard and difficult to push out. So, we do need fiber, we need water, and also exercise.

But again, medication can impact that too. So that being said, you do want to talk to your doctor if you're chronically constipated to see if there's a supplement or something that you need to take. But generally, water, movement, and hydration. Water, hydration, and movement will work for that, okay?

Kimberlee Baugh

Okay, perfect. And so lastly, we're going to wrap it up here, but I do want to ask, we do have a lot of folks with comorbidities, right? So along with MS, we have other things going on. Crystal in the chat mentioned "I have diabetes and hypertension as well. What kind of food works best?"

Ashley Carter

Yes, so when it comes to diabetes, the diet that's recommended for MS is going to be similar to what you're going to do for diabetes as well. The main thing is just having a balanced diet. So again, you want to make sure that you're not eating too much when it comes to protein or too much when it comes to carbohydrates.

And when I say too much, you can use your hands as a measurement tool. So, your palm should be the serving of protein and your palm is a serving of carbohydrates. And if you have big hands, use somebody else's palm, okay? No cheating. So, with that being said, when you think about your palm, if you were to put a piece of chicken, salmon, pork chops, whatever it may be on your palm, that will be one serving. So, if you're eating a large portion of protein,

that's going to be part of the problem. Or if you're eating large portions of rice, that's part of the problem, not knowing our portion size.

For vegetables, one-fifth is a serving, and we want two servings on every plate. And that's recommended for diabetes as well, for hypertension, for an anti-inflammatory diet. So pretty much what I told you today can be applied to all of these different health conditions.

And that's why I encourage you not to eat separate from your family. You're not on an MS diet, okay? This is not an anti-fatigue diet. This is a standard healthy eating pattern that you and your family can adapt together so you don't have to isolate yourself and eat special foods. The entire family can eat this way.

Kimberlee Baugh

Perfect. I know there were a couple more questions we didn't get to, but please feel free to reach out to Ashley. Her information is on this screen.

Please call our toll-free line with any questions you have related to MS. We are always there for you. Thank you again, Ashley, for sharing such practical nutrition strategies with our community. This session was incredibly informative and we truly appreciate your time and expertise.

To everyone joining us from home, thank you for participating. Just a quick reminder that today's webinar was recorded and will be available on the MSAA website in the coming weeks.

We would also greatly appreciate it if you could take a few minutes to complete our survey and share your feedback about your learning experience. On behalf of all of us at MSAA thank you so much for participating and have a great evening.