



>> Welcome, everyone, and thank you for joining the American Brain Tumor Association's webinar series and thank you for participating in today's free educational webinar. Our webinar today will address: Living Well, With and Beyond a Brain Tumor. It is presented by Elizabeth Sherwood, RN, MS, ANP-C. Please note that all lines during our webinar today are muted. If you have a question you would like to ask, please type and submit it using the question box in the webinar control panel on the right-hand side of your screen. Ms. Sherwood will answer as many questions as possible at the end of the presentation. Tomorrow, you will receive an invitation to complete a brief feedback survey. Please do take a few minutes to share your comments about today's webinar. Your feedback is important to us for future webinar development. We are in the midst of planning 2015 webinar series we are recording today's webinar and will post it to the ABTA website shortly. You will find all our webinars that we have recorded under the anytime learning section. You will also receive the webinar link and a follow-up email once the webinar is available. We will pause for a moment so we can begin our webinar recording right here.

>> The American Brain Tumor Association is pleased to welcome you back to our Webinar Series. Our webinar today will discuss: Living Well, With and Beyond a Brain Tumor. My name is Jillann Demes, Senior Program Manager here at the American Brain Tumor Association and I am delighted to introduce our speaker today, Elizabeth Sherwood, RN, MS, ANP-C. Ms. Sherwood is an advanced practice nurse with a master's in psychiatric/mental health nursing and as an adult nurse practitioner. She has worked in oncology for over 15 years and currently coordinates the University of North Carolina's Survivorship and Integrative Medicine Programs in oncology. She also specializes in working with the UNC Neuro-oncology program. Thank you so much for joining us, Ms. Sherwood. You may now begin your presentation.

>> And I would like to thank all of you for participating today as well as the American brain tumor Association for this opportunity to speak with you all and hopefully we can learn some ways from each other and today's presentation about your goal of trying to live as functionally as possible given some of the issues you may be confronting. I don't think that any of you would doubt that the diagnosis of a brain tumor can be a crisis in many of you may be in the early stages of the diagnosis and treatment and some of you may be in the later stages. There oftentimes different issues that come up depending on where you are in your treatment. We are going to try to address a few of those today as well as hopefully have time for your questions afterwards so we can approach what the issues are that you are finding most in need of answers. We do know that as you move forward with this time in your life that we are fortunately being able to report better outcomes, but despite outcomes we know there may be side effects of treatment as well as late-term effects of treatment that can impact and provide challenges that are new for both you, your caregivers, and your family. What may be challenging can be different depending on the type of tumor that you have, the type of treatment that you have, your age, as well as where the tumor is located. Many of you I am sure have looked up to find out about the type of tumor you have and where it is located and what we know is different parts of the brain can be impacted which may impact things from personality to mood to mobility and to a variety of issues that can present problems not only for you but are so -- also your family. We will talk today about finding your way and I am hoping that today's presentation

can be helpful both to patients and caregivers as some of the information will apply to both of you. We know this is a new set of challenges and there may not be a roadmap that is easily provided to you. So how do you decide where you want to go? We do know that for many people cancer has a way of putting things in perspective. Things that seemed very important before may not be as important and things that were not as important before may have new meaning for you. At the beginning of your treatment as well as sometimes longer-term into treatment there can be a variety of challenges and there may be people that you find that can be helpful. I know there are help lines through the American brain tumor Association and blogs that can be a source of support, what for many people it is uncharted territory and it's like finding your own way in a new country and with new language. That can be in itself very stressful.

>> We do know that a diagnosis of a brain tumor can be something that is particularly jarring and that many people both patients and caregivers can experience anxiety, fear, worry, there could be difficulties with sleep and there could be challenges and thinking about where this cancer will lead and what your future looks like. Many of these things are challenges for you in terms of how you see yourself as a professional, how you see yourself as a parent, and how you see yourself as a partner. We do know that emotional distress can be quite high at different points during your treatment as well as after treatment. Oftentimes people are surprised by the distress that is experienced when treatment is complete. We also know that if a emotional distress is not addressed, if you are not letting your healthcare team know that you are suffering from depression or if you are worried so much that you were not sleeping well, it can actively negatively impact your quality of life and how well you do day to day and your ability to adhere or take part in your treatment as fully as that might be. at might be during your active treatment phase, during radiation, as well as if you need to participate in rehab posttreatment so I want to encourage you all if you are noticing challenges with your moods to discuss that with your healthcare team. That can be something as a family member and a caregiver that can be particularly challenging as some of those mood changes might be reflective of where your tumor is located. It can be challenging because what might be considered apathy or not wanting to do things may be in fact in part be because we're the tumor is motivated and it's impairing your motivation. You can understand the importance of understanding where the tumor is located and what kind of impact that might have on personality can be very difficult for the family if there is not that understanding as well as for the patient.

>> Many times and with many types of cancers we do know that there is a way to foster your well-being and your sense of resilience. There is one way of becoming very active in your healthcare plan. Sometimes that maybe the patient and sometimes the caregiver and ideally it is both. Taking control of your health can mean being prepared with questions, knowing who to go to with your questions, and finding out from different resources whether that be online with the American brain tumor Association or through the cancer center that you are being treated where to go if you do have a problem but don't know the answer. We do know as I mentioned before that there are many emotions that come up during this phase. We do know also that many people fear talking about these intense emotions because they are thinking they are the only ones who are experiencing them. I can assure you as a professional one of the things I often do is a sure people that what they are experiencing is experienced by most people who are dealing with a diagnosis of a brain tumor or concerns about what will be the next step. It can be very reassuring to let people know what is going on. When we tried to hold this in it can lead to other areas of difficulty and I will address that in a little bit. We do know that increasing your positive emotions can also be very helpful and what I mean by that is not that you are just supposed to be positive all the time and that you are supposed to deny what is going on. What I mean by that is if we can look for little glimmers in our day of things that we are grateful for, or if we know for example that we enjoy spending time with family or friends, that we had knowledge our gratitude for that. It can help us to not only feel better about our day to day

experiences, but it also can help us to increase our positivity and there are benefits to feeling more positive, both from a neurological perspective and a physiological perspective and of course from an emotional perspective. We also know that social support can be very important. This can be a challenge when you have been diagnosed with cancer. Sometimes friends that you thought would be there are not and sometimes you can be surprised by the people who do rally around you. But there are many avenues for social support and once again, that might be through a support group or through a church or spiritual group and I encourage you all to realize that sometimes getting through this on your own or with just your caregiver can be particularly challenging for both of you. Expanding your social support may be something that is helpful. Another area that is been demonstrated to foster resilience is deepening your spiritual connection. For some people this may mean their George family or their religious affiliation and deepening that connection. For other people it may be regular walk out in nature or to listen to music that touches their soul. What we do know is when we increase our sense of connection to the world and for what we consider bigger than just us, it helps in terms of fostering resilience. Another area that has been demonstrated with research is a sense of purpose or a reason for living. For many people this can be family or certain events, it can be your desire to give back and no what you received during your treatment and to become an advocate for other people going forward. As you can see there are many different areas that are important and helpful in terms of fostering your well-being. we also know that one of the most common things that gets in the way of all of this is anxiety.

>> Anxiety can be particularly difficult to both pinpoint, to acknowledge, and to figure out what to do about it given all that is going on. Everyone is different in how we deal with anxiety. I am sure we all know people who we can say that they are an anxious person. Other of us may experience anxiety by having headaches or being more physically agitated or active. We may have sleep disturbances or we may just be tense, and what can be particularly challenging with anxiety is that it is oftentimes related to fear. But if we don't get in touch with where that fear is coming from, anxiety is a global experience and therefore it feels harder to get a handle on. So as I was speaking about earlier, angering out your way can be something that is very helpful in dealing with your anxiety. Being able to figure out if it's going to the hospital because that reminds you of certain events, or if you are someone who knows that needles for procedures are particularly challenging, figuring out some of those areas can that help you prepare so you feel like they -- there are ways to deal with your anxiety. We know of course that the diagnosis of cancer opens many doors that are related to the fear of vulnerability, pain, death, worries about what may happen to your family, and of course these are much bigger issues and they are much more challenging in the face of being tired, or recovering from surgery. We do know that at different points in time you may be more comfortable and talking about is or dealing with it. I do encourage you to think about is that it's not something to necessarily push away but it is something to share with your loved ones, would your healthcare team, so that the resources that we know have helped other people at this time may be made available to you also.

>> Oftentimes people struggle with depression and ongoing worry and anxiety can lead to depression because of sleep disturbances. As you can see from this slide where there is some colored red and some that is black is that many of the things that we associate with depression are in the disguise of someone with a cancer diagnosis can also be very much related to both the cancer and/or the treatments. For example we know that many people have to take steroids to deal with the swelling from brain tumors. We know for example that steroids can lead to sleep disturbance and agitation. They can leave to a host of problems with your mood so it is important to understand that their oftentimes physical aspect that going to causing a person to look depressed as well as mental and emotional aspects. When you are noticing that you are feeling particularly guilty or worthless or that there are feelings of lack of hope, that oftentimes is a good indicator that it is more important to address this and let people know. One thing I want to encourage you all too is if you notice your self

or your loved one experiencing more than just a few days where it is hard to see a glimmer of something good, then that is the time to let your healthcare provider know. Your oncologist or if you have a good relationship with your primary care doctor, so this can be addressed before you feel increasingly depressed and have a harder time shifting out of that.

>> It could be depression but it could be lots of other things as well. We know that some of the medications that are given, for example some of the medications that are given for nausea particularly Compazine if taken in higher doses can cause some people to experience a motor restlessness or akathisia which can seem like irritability to some people. It is why I am encouraging you all to talk with your healthcare provider if you notice things. Likewise for many patients who have had brain surgery and brain radiation there may be a heightened sensitivity to some medications to cause a delirium. A delirium is something that happens and can be very confusing for the patient as well as the family member. The patient may be talking in a nonsensical way or maybe more confused, and once again this can be because of many medical problems. It's an important reason to call your healthcare team. These kind of stressors as you can understand make it particularly challenging for you all in finding that's quality of life that I know you are striving for.

>> Many people expect depression to look like someone who is lying in a bed or oftentimes tearful but once again people can be very different. It may be irritability or some people say snapping at people when they talk or just not happy about anything. These are some of the ways to identify the difference between depression and the physical -- physiological challenges I was talking about previously. So we're going to talk about ways to foster that resilience and that sense of well-being, seeking solutions and being an active participant in your healthcare, and what you feel like you'd need to move forward is one way that can help one feel more empowered and more of a sense of being in control. We know for many people one of the biggest challenges with a diagnosis of cancer and coming for treatment and perhaps waiting for treatment is that sense of a loss of control. It can be very unsettling for people. This can be one of the means of feeling you have some control in a situation that may feel very awkward at times. We also know that if you experience ongoing issues with anxiety and mood that for some people there are some medications that can be helpful. Medications may be helpful for some and for other people it may be pursuing other means of dealing with well-being and mood and helping with things like fatigue and how you feel as well as sleep. As you can see on this slide quality of life is impacted by many different areas in our lives.

>> One of the ways to think about how to move forward at a time such as this is to think about these different areas, whether it's physical well-being and symptoms, or social and family relationships, or psychological concerns and spiritual concerns, and identify in which of those boxes are you feeling most challenge by currently. Then you can narrow down what some of your choices may be. One thing we will talk about today is how to begin to do that. We know that more and more of you are living longer after the diagnosis of a brain tumor so your challenges may be different. There may be some later or long-term effects that people notice after years of treatment and I am going to discuss those briefly because those also can be improved by getting in contact with your team and finding out ways of moving forward. We know some of the late and long-term effects of radiation may be challenges with cognition. Some people find they can return to work but their ability to multitask or the flow of work that they experience before is more challenging. There may be problems with your endocrine system particularly if you received radiation. One area that can be challenged is your thyroid gland so you might have thyroid abnormalities. Additionally there are vision and hearing changes that can also be from radiation but there are many doctors who are very good in terms of working with your neurologist and your neural oncologist who can tell -- help with these issues.

>> Some late effects of chemotherapy can be elevated blood pressure as well as muscle and joint pain and some memory issues and that sense of chemo brain that you hear more and more about as we have identified it as something many people experience.

>> So we're back to figuring out your map and your way of moving forward at such a difficult time. Ideally there have been some respite from the challenges at the beginning but one of the big things that we know whether you are in active treatment or afterwards is that it oftentimes feel like you have to figure it out on your own. So as we move into that phase I want you all to consider where is it that you want to go. What is it that is the most problematic at this time and where do you want to put emphasis to help both how you function day to day, whether that be from a physical perspective or and promotional perspective or from a spiritual perspective, and how might you make choices to begin to plan to do that in a way that brings you a better sense of well-being and a sense of being more connected to both your family and to a purpose and a sense of meaning?

>> Taking control of your health, if you remember on the previous slide we talked about things we know help to foster resilience and well-being and one is taking control of your health. More and more in the cancer setting we are working to try to help patients at the end of treatment get an idea of what their treatment summary was and a care plan. What I mean by that is it is a document that helps for you to understand what you're treatment was as well as what some of the side effects that you may notice both short-term and long-term, and importantly, what your follow-up will look like. We have not been so good in the past of letting patients know from time to time so part of that idea and for you to be proactive is to get an understanding from your physician at the end of your treatment what your surveillance will look like. Part of the reason this can be helpful is that will let you know for example when you are scheduled to have MRIs or when you need a scan. We do know for many people after their treatment is done that those surveillance scans can be a time of heightened anxiety. What I say too many people is make sure for three or four days or even a week before your scan you are doing things you know help you to feel less stressed or give you some sense of call him so by the time you get to the scan you are not emotionally exhausted. Likewise it's not uncommon for many people after treatment to worry about everything in terms of is it a symptom or indication of my cancer coming back or my cancer progressing? Those are good questions for your healthcare team at the completion of your treatment. Which symptoms should I call you for? When should I call you if I experience such and such and that helps you to feel empowered and that you of more information to take control of your health. Likewise for many people at the completion of treatment or during treatment or even intermittently during times of healing and recovery there can be great advantages to participating in rehabilitation services. These may be actual rehabilitation services or it can be for different wellness centers or programs and opportunities to take part in physical therapy or speech therapy or exercise therapy. That is a more and more commonly held program at many cancer centers as more and more research indicates the benefit of physical activity and exercise and I will address that a little bit later. If you are noticing as I mentioned before that the cognitive concerns or the emotional concerns are really causing a lot of worry or difficulty in relationships than it is time to find out what is offered and if things are not offered, to make sure you let your health care team know that you think it would be a great idea to offer that it your institution. I will assure US someone who is been working in oncology for over a decade that it is oftentimes patients and families that bring up what is needed and what they would like to see that help those things to happen at your cancer center.

>> We do know that there are some general principles that can help people to feel better sleep better and I will address some of those now. As many of you know there has been more and more in the popular media as well as an research literature of the benefits of eating well as we change our diets a little bit from process foods to foods that are fresher. It easier for most of us to do this in the

summertime and it can also be very confusing because there is information about not doing this or that, and I think one caveat you can remember is to try to eat more fresh fruits and vegetables. And tried to choose healthy proteins, and by that I mean there is more literature that indicates for example that process's meats are probably not great choices. That is a way to begin to implement some dietary changes that we all can do. I teach a class called cancer transitions for people after treatment of one thing I commonly say to people is if you pick up any food item that you are going to eat and you look at the list of ingredients and you can't pronounce them or know what more than 4 of those ingredients are on the package it's probably something to think twice about eating. We know that making changes in your diet should not be something that is all or nothing at one time, but it is doing slow steady changes. For example if you know that routinely you of one serving of vegetables and maybe 2 servings of fruits a day, perhaps you can try to eat 2 vegetables or three fruits. To do things slowly and steadily will help it to become part of your plan for moving forward with health and also is not something that doesn't resonate with you. It's important for you to feel like the choices you are making as you move forward make sense to you and that you enjoy them. In that light for example with food it can help to think about food from many different perspectives. You can think about the color, the texture, the appearance, and be mindful of all that goes into bringing that food to your table. When I was talking about positivity before and expressing gratefulness, one of the things I know I learned from one of my participants in my group was she took a minute to think about all the things that went into bringing the food to her plate and expressed some gratefulness to that process. Little things like that can help you to not only enjoy your food more but also to appreciate the benefits and the good fortune we have to be able to have so many delicious options on our daily plates.

>> I will assure you that I've heard from many people that I worked with that physical exercise is a dirty word and if you find out about yourself I encourage you to think of it as movement or activity or a way of being able to help you do more of what you want day to day. One of the side effects of people with brain tumors often experience is fatigue and while I know it seems very difficult to understand why fatigue would be benefited by physical activity, we do know in fact it is one of the things that helps. We also know that physical activity can help to increase your mood as I mentioned before and reduce stress. Additionally for many of you if you take steroids one thing we know about steroids is it can cause some decrease in muscle mass as well as changes in the strength of your bones. So long term especially physical activity can help regain muscle mass and improve your bone strength so it can be particularly helpful for you to incorporate that. I also know it helps with sleep and as you can see here we know it also helps with blood pressure control and cholesterol levels which as I mentioned is oftentimes a problem for many of us and can also be a delayed or late-term effect from some of the treatment you have received. You can see it can be helpful on a variety of levels.

>> As I mentioned before it is important to start where you are and to think about incorporating physical exercise or more movement in a way that you would enjoy. If that means walking down your driveways a couple of times with your dog to get the mail, it might be as simple as that. It could be something that all of us can find ways of increasing and also benefiting us. One idea is for people to get a pedometer which is a small thing and now there are Fitbit and all different ways of measuring it but what it essentially does is measure your steps. The benefit of using one as you can wear it for a few days to just see where your average is. If you are only getting 3000 steps a day thinking that you will go from 3000 steps to 10,000 steps in a short period of time maybe an unrealistic expectation. You could try instead to increase it by 100 steps a week and therefore have some success in what you are doing. I encourage you all to think about this is also something you can do with your partner, a family member, or finding someone who might want to do it with you. We do know that this is one

of those areas where having a body or someone else who can help us accomplish the task can be very helpful.

>> There are a variety of techniques to get in more exercise and many ways of strengthening your muscles. For some people they like to incorporate exercise that also helps them to relax and improve stress reduction. The yoga is one area that we have more and more research on in terms of helping to improve fatigue. One benefit of yoga also is a can help with balance and for some of you, you may notice that balance is one of the things that was impacted by where your brain tumor is or some of the side effects of the chemotherapy. Ideally you will find yoga teachers weather at your cancer center or associated with a wellness program who are familiar with people who have been in treatment for cancer and therefore can work with you in a way that helps you to improve in the areas you can, and for you not to be in a situation where you do exercise that you don't consider helpful or are worried about.

>> Pool exercises can be great for people if you have joint aches and pains because it takes the weight off your joints and allows you to exercise in water and that is very something. I also want to point out for those of you who feel you can't do more active exercise routines that there are many ways of improving muscle strength by sitting in a chair and using therabands or scratches. Oftentimes there will be a physical therapist that can help you to do this. As I said it does lead to many benefits that go beyond just inking about it as exercise.

>> Another area that I am sure you of heard more and more about because it is increasingly in the popular media and in research that we are receiving on the medical level is the benefits of mindfulness which is a form of stress reduction that encourages the individual to practice in a certain way that I will discuss in just a minute. Mindfulness was first used back in the 1970s for people who were dealing with heart issues or cardiac issues and was found to be very helpful in terms of lowering blood pressure. Over these last few years we're seeing it helps in more and more ways. As you can see from this slide some of those ways that it helps our increasing one's sense of vitality, life satisfaction, positive affect, your sense of being able to feel connected and competent. Interestingly enough we know that many physical symptoms respond to the practice of mindfulness. It has been shown to help decrease pain and improve headaches and so we know it -- its benefits are far reaching. When people think of mindfulness some may know this is practicing a breathing exercise. For others it may be practicing a centering exercise, and what I mean by that is it may be repeating a certain phrase over and over, it may be reading something that is important to you and it could be Scripture or poetry and allowing yourself to focus on that. In general the premise of it is that you are allowing yourself a period of time and for some people that can be five minutes or it could be even longer where you are engaging in relaxing and breathing slowly and trying to keep your mind from wandering to all sorts of places. It is an exercise in self compassion in that for most of us it is a difficult thing to do. We may stop and think about what we need to put on a list or begin to worry about something and it is slowly practicing bringing your attention back to your breathing or bringing your attention back to the quote that you were using as your guide. For other people they may actually listen to guided meditations. This is an area where there are lots of ways of doing it. There are some great guided imagery meditations and guided imagery choices on the Internet that you can find. I know there is one resource called sounds true recordings that offer quite a few options. We know that the practice of this, as you practice more and more just beginning the practice actually helps relaxation response to begin. So there is benefit to trying to practice it regularly and we know that this is another one of those techniques that you might choose on your map to help you move forward with the heightened sense of being able to be proactive about your care. We do know also that it can help with that sense to reflect on what is important to you, what is going on, and help you to plan on going forward.

>> Just a few more things to think about before we begin to take some questions. I mentioned the importance of social support, and this is a difficult time often for both the patient, the caregiver, and the family and we know that social support is an important variable to consider as something that can be helpful. It can look different for each one of you and the point and thing is to figure out for yourself what you want it to look like. It might be conversations on the phone or by email or in person. All of us to ride strength from others that we feel care for us is something that can be helpful.

>> I could give an entire talk on humor but we are addressing many things that can be helpful. Part of my goal today is to give you options for you to choose which one of these things might be helpful to you. We know that humor has physiological benefits. It helps you breathe better, increases oxygen, and a good laugh helps with relaxation and to feel connected. We know from research that there are changes in hormones and neurotransmitters and that can be achieved by watching movies or funny videos. It's something to think about incorporating into your day to help your sense of well-being. And before we stop there are a few other areas I would like to address.

>> Many of you have been in a hospital environment where you had surgery or blood draws and there are lots of intrusive touching that goes on and I am someone who greatly believes that if you are inclined towards touch that is more rewarding, there are different ways of receiving that. Massage is something we offer at our cancer center that many patients find helpful in terms of the healing process. We know that touch helps us to feel cared for and it is very important for our sense of well-being and our psychological growth. So that is something to incorporate as well as communication, and many of you may be listening to this with your partner or caregiver and we do know that communication once again can be a challenge. It can be a challenge not only from where your brain tumor is located if that is one of those areas that makes communication more challenging, and also because this is an emotionally intense time and you have never been here before. It may be very tricky for couples that were not used to talking about such things in such a fashion because it is a new behavior with all that is going on back and feel overwhelming at times. We do know that being able to acknowledge that this is the new and you have not been here before and that you don't know how to do it but you will try to figure it out together is something that can be help will -- helpful. It also takes the right and wrong out of the situation. We're just trying to figure it out to gather.

>> I will encourage you as we come to the end here is to allow yourself to give some time in reflection about where you are right now and what you think might be helpful going forward. If you have an idea about what some of those things are, seeking out resources or referrals from people on your health-care team or at your cancer center or through the American brain tumor Association, there are lots of ways of finding out the resources that are available for you. And for those of you who are listening today located in more rural areas where the resources might not be so easily available to note that there are ways of linking you with some of these resources, whether through the Internet or by telephone so you don't have to feel like that is not available for you.

>> As we close I want to thank all of you for participating and also to the American brain tumor Association for this opportunity or us to be able to have some questions. I know I have a couple of resources that will be listed here and you will be able to find later on the website when they are posted. Many of them are through the American brain tumor Association so you will be able to find that as well as I listed some resources for young adults. I know young adults who are dealing with brain tumor diagnoses can be particularly challenged. One other resource I would like to mention is the campaign -- cancer support community has a great booklet that is on brain tumors that talks about both the physiology and some practical concerns and the cancer support community that might be available in your resource Center. That can be another resource for you. Thank you.

>> Thank you so much. That was wonderful. My colleague and I were taking notes souls -- so thank you so much. We do have time for questions. Ms. Sherwood will now take questions. If you have a question you would like to ask, please type and submit it using the question box in the webinar control panel on the right-hand side of your screen. we do have some that were pre-populated from the registration process so I will start with those.

>> Someone is talking about the immune system and how hard it is to keep the immune system strong through all of this with blood platelets. Any suggestions on how to keep it strong through all the different challenges? Any tips or techniques? I know you talked about eating well, anything beyond that?

>> I think that is a great question because we know the immune system is something that is very much challenged during treatment and it is something we know can be fostered in a variety of ways. As I mentioned before there are more and more research with the benefits of practicing some mindfulness techniques with aiding the immune system. That might be one thing to think about and as I said it can be as simple as doing the breathing exercise for five minutes maybe once or twice a day. You can download some of the guided meditations .1 challenge during treatment from a nutrition standpoint which can also help the immune system is there may be appetite concerns or if your accounts are challenge they may be encouraging you not to eat fresh fruits and vegetables. But no there are ways of still getting nutrition in that way depending once again on appetite. Many cancer centers have nutritionists available or have resources in the cancer center resource room so that might be another option to see what me -- might be available from a nutritional standpoint. Check with your hospital dietitian or nutritionists and I do know that can be a challenge and the platelet count of course is something you and your health-care team are concerned about. So making sure you ask them also what might be helpful.

>> Great. In addition to the healthy guide I'm not sure you can go there but someone is asking about recommendations on supplement maybe with memory problems, fatigue and nausea?

>> There are variety of supplements and this is one of those kind of areas where there are some mixed thoughts about the use of supplements. What I like to think about that is if you are in active treatment meaning you are receiving radiation or chemotherapy, then you definitely want to check with your radiation oncologist or your neural oncologist because there can be some interference or difficulties with supplements. I think that for many people depending on your particular brain tumor, for example there has been some research done with ginseng for fatigue after chemotherapy. Many people will go for an integrative medicine consult. We have a physician and in our medical Center who specializes in that. Aftertreatment I do think there are often times wonderful resources in terms of working with an acupuncturist or working with some type of integrative practitioners who are well-versed in treating people with cancer that can be very helpful. One caveat that I would like to say about supplements if anyone is trying to give you a substance that is going to take care of everything, it is probably something you should have doubts about. There are many integrative practitioners who work well with people after they have been through treatment to help with that restorative healing process. Oftentimes this might be something that is done through discussion with other people in your community. I am not sure if the American brain termer Association had a publication about two years ago if I remember correctly on integrative therapies that have been found helpful for people aftertreatment. Also really good nutritionists can help you with supplements and of their our particular supplements that might be helpful after certain chemotherapies or certain cancer diagnoses.

>> Thank you. We had a webinar under our anytime learning section so thanks for that shout out. Someone is asking about different kind of water. Is one kind of bottled water better than the other?

>> That's probably always a good question. I do know that just a few years ago there was a study done that demonstrated that some bottled waters were really no better than tap water. I think for drinking water and staying well hydrated can be something that is very important for fatigue, headaches, for a sense of well-being so drinking water is very important. If you live in a community where there is city water system, one benefit of that is they all have to have a report on your water quality so if you are concerned about what might be in your water that is definitely one place to go. Or if you know your water in terms of the taste is something you don't like, then perhaps bottled water is an option. I think the whole idea of bottled water is a little tricky in that some of that is just challenging because it's not probably better than your tap water depending on where you live. I do know that drinking water as well as drinking beverages that help to hydrate you is what is important to do. I encourage you if you have concerns about your local water supply or you want bottled water from a larger distributor then that is something to look into in your particular community.

>> We have time for one more question. Someone is worried about exercise after the jacket John osteoporosis kickstand. They would like to know how they can still exercise?

>> It's a great question because we know osteoporosis is something that can be very challenging and thereby something that weight-bearing exercise is actually helpful in terms of the slowing the progression of osteoporosis. It can be important but depending on what you know about your bone strength, that is something that if you are worried or have already been diagnosed with osteoporosis to know where your bone strength is is important so you don't do anything harmful to your bones. For example when I mentioned yoga, there is a doctor in New York who has done increasing amounts of research with certain yoga poses that can help to benefits osteoporosis. We know that walking is one of the most helpful activities that can help with osteoporosis. The challenges if you are having pain to make sure that the pain is addressed so you are not causing more pain that is then causing you to be more physically active. It does not have to be running or vigorous exercise but routine weight-bearing exercise can be helpful. And if you are worried about more vigorous exercise it could be were doing some of the movement therapies like yoga can be particularly helpful.

>> Thank you so much. It was so informative and we really appreciate it. That is all the time we have for today. Thank you all for joining us and thanks once again to Ms. Sherwood. For more information on any brain tumor related topic, our licensed health care professionals can provide you with support or help, you can navigate our site, or just give us a call at 800-886-2282. we will posit for a moment while we conclude our webinar recording and then we will talk to you about our upcoming webinars.

>> We invite you all to continue to check back at our website www.abta.org for other brain tumor related topics in our webinar series. Wednesday, 9/10/14 from 2:00 p.m. to 3:00 p.m. Central Time. Meningiomas: Risk Factors, Treatment Options, and Future Advances. Join Ronald Warnick, MD, of the University of Cincinnati Brain Tumor Center, as he presents a webinar discussing incidence rates, risk factors, tumor classification and presenting symptoms of meningiomas. He will explain the role of imaging as well as various treatment options including surgery, radiation, and chemotherapy. The presentation will also explore clinical trials and future advances. then Wednesday, 10/8/14 from 1:00 p.m. to 2:00 p.m. Central Time. Ketogenic Diet for Brain Tumor Patients. Join Leonora Renda, RDN of University of Arizona Cancer Center at St. Joseph's Hospital and Medical Center as she discusses what the Ketogenic diet is, how to achieve ketosis, the challenges associated with this specialty diet and the results that have been seen thus far in the research studies. so this concludes our webinar. Thank you for joining us and please be sure to complete the feedback survey you will receive shortly following this session. You may now disconnect. [Event concluded]