Good morning everyone and thank you A’riel for getting us started here. While I do a rundown with more details if you all could respond in the chat where and what specialty in nursing you are working with or if you are not a nurse, what particular specialty you are working towards. I would like to have an idea of who is in the room today and then we'll get started. When I was reviewing for this Training today and what am I going to talk about, I kind of chuckled with, how did I get where I am and what am I going to talk about? After graduating from college, the last thing that I thought I was going to do was join the Navy. My dad was in the Navy. We moved around a lot, I think I counted 14 times before I graduated high school. My brother and I were talking and he said, “Hey Michele, this is the best thing going, you know I've been to Italy, I've been to Spain, I've been here, I've been there. You've got to do this”. I replied All right let's do it. Where did I go? Portsmouth, Virginia. He joined the Navy and saw the world. I joined the Navy and I saw the United States and Okinawa. Before I was at OIS, the last thought I had was where do I want to be? I want to be in Spain or Italy or one of these cool places. I go to Virginia. Myself and 17 others from my OAS class came down here to Virginia. As I'm driving down with one of the girls that I met there, we were talking about, where do you want to work? What do you want to do? I would be comfortable with everything, unless they give me neuro because that's where I was the weakest in school and had trouble with. As long as I don't get neuro, I'm good. She said, yeah that’s great. As long as I don’t get ortho, I'm great. So we get here and we get the assignments, and what do I get? I get neuro and she gets ortho. So in our infinite wisdom, we went to ask the head to switch. I don’t know if you remember the 80s, but needless to say, I stayed in neuro and she stayed in ortho and the DSN knew our names.

I quickly learned, whatever I really want, don't ask for it because you're not going to get it. And whatever you don't want, tell them that’s what you really want. Right? Because then you won't get it. So from neuro surgery, I went to pediatric surgery and enjoyed a year or so there. Got a little bit of assistant division officer indoctrination. From there, I went to the NICU. While in the NICU the Desert Storm happened. Myself as a baby lieutenant and one ensign nurse corps officer ended up staying here in the NICU while everybody else deployed to Desert Storm. I became a division officer, had to keep the NICU running, all of that. And then, thank goodness, all of the reservists showed up and I had people who worked in that NICU before and had run that NICU before. So, again, opportunity in disguise. Instead of going to Desert Storm, like I thought I would be going, I went to Okinawa. So when the volcano in the Philippines, mount Manitoba blew up, I ended up having my first child. That’s when I found out that natural childbirth is not the way to go for me. And even though I thought breast feeding was a natural thing to do, it wasn’t a natural thing for me. So, I learned when you criticize others, you get handed that plate, right? So once again, opportunities in disguise.

I had learned so much about those processes and helping other patients that, when it was my turn, I was able to move through with some sort of grace and dignity and not give up on myself. So, from Okinawa, I ended up in Charleston, South Carolina, where I worked in pediatrics. That's when

ADHD was becoming known and everyone was trying to figure out what this mean? Was it a pediatric problem? Was it a parenting problem? And then I had my second child who had a learning disability and ADD and I learned more than I wanted to know about that diagnosis. So again, an opportunity in disguise. From there, I ended up in Brunswick, Maine, at a branch medical clinic where I had my third child. You can see the running team. Every time I go PCS, I have a child. By the time I got here to Portsmouth and had my fourth child, it was time to retire. From there, I was trying to figure out what I want to do after retirement. I ended up talking to some of the other nurses that had retired ahead of me and what were they doing? I started in case management for workers comp and that's when I started getting my first real view of pain management and chronic pain and how do we handle those sorts of things. I didn't really understand chronic pain. Most of my experience had been with acute pain. The way we handled acute pain back in those days, of course was narcotic, pain management and some physical therapy. Alternative therapies were not around yet or not accepted yet. It's kind of like crazy talk. Mostly medication, pain management, some injection, pain management and physical therapy to get those pains through that. With me not understanding pain management, I ended up with back pain issues, so again opportunity in disguise. Having to work through my own treatments and my own back pain, I ended up looking into some alternative treatments. Are we giving these people the ability to move forward or function beyond that pain?

That's where the topic of my talk comes from. How do we get these patients to be able to function beyond this chronic pain situation that they have found themselves in by a myriad of different stories to get them to that point? From my case management out in town, I ended up coming back to the military hospital about ten years ago mostly due to my daughter becoming sick and having to come off the road. When I do Workers' Comp. case management, I covered Fredericksburg to Raleigh. I don't know how many of you know of this but that’s a vast area that I cover. I would go to the appointments with my patients. I would meet with the patient at the office, talk to the proceed slider, get the work restrictions, make sure they got the care they needed, that sort of thing. I would also report back to the insurance companies so that they would know what treatments were forth coming, what we were looking for from these patients and where we were going to be able to get them back to work. Because of being out on the road so much and my daughter getting sick, I had to come off the road. I happened to be out on a cycling trip in the neighborhood. I started to get into cycling, ran into then clinic manager from orthopedics here and within about a 25-mile ride he talked me into coming to talk to him. That's how I ended up back here.

During my time as a case manager here in the orthopedic department, I got much more involved in chronic pain, chronic pain patient, recovering according to schedule, injuries, surgeries and so forth. I became acquainted with Dr. Love. I don't know if you have heard him talk. He is presenting this year. But he was our pain psychologist here in the orthopedic clinic. I ended up working very closely with him, learned more about the mental health aspect of pain management. Dr.Love then abandoned me for the first time and went into the trays, transferred from orthopedics to the pain management clinic here. He then tried for two years to talk me into coming to pain management. There was not a position

open and I was very reluctant to become a GS civilian. I liked my contractor status at the time. We helped each other out and went back and forth. I became familiar with Dr. Douglas, I'm sure that you are familiar with him, doing talks in this forum in the past. They convinced me, between of two of them, to move over to pain management. In 2013, I ended up here in the pain management Clinic and more fist cannily in the interdisciplinary pain side of things. I worked with an acupuncturist, my pain psychologist, pain psychiatrist and physical therapist. We worked all in conjunction with each other to try to find different avenues and roads to get these folks a more comprehensive pain experience. Pain management experience.

So then, a few months ago Bill says hey, Michele, you have to meet Amy Osik. She works in Bethesda, great person to know, great networking, all of that. I said, great. We spoke through E-mail conversations, we get to know each other, and everything is great. Bill says then, hey what are you doing the first week of September? I think I'm going to take some leave and I need you to cover for me. Yeah, great, no problem. He says, oh by the way, I put you down to teach in the pain skills training. I said, great, I think that will be a great experience for me. That's how I ended up talking today, courtesy of Bill trying to get me integrated fully in the pain management in the military. Hopefully, I'll do y'all justice, give you information that will help you out and we will, you know move forward in this evolving. I'm just looking back over where everybody works in the class. A lot of pain management folks and we've got program management. I didn't go through my disclosures. I need to let everybody know that neither myself nor I or my spouse or partner since I don't have one right now, expect to have any financial relationship with any of the companies or things that I may talk with today. And that the talk that I'm giving today is my views that are being expressed and they don't reflect any sort of official poll at this of the department of Navy, Army or Air Force or the government.

As I said before, we're going to talk a little bit today about functioning beyond the pain. Why do I say functioning beyond the pain? I say function beyond the pain because, when we get to the point of chronic pain, oftentimes, that patient is never going to be 100% pain free. We all know this, right? So we have to deal with this patient's chronic pain, what can we do to minimize that pain to make that pain more tolerable to the patient so that patient can have some sort of semblance of normalcy in their life and still be able to have quality of life and enjoy their life and hopefully their continued military careers and their home life as well. I'm going to talk a little bit about how we as nurses can affect that situation.

So, as we know, with acute pain the patient will have an injury or an illness or something that brings on this pain. The patient receives the treatment, hopefully they go through the treatment, achieve a state of healing. They have a resolution of their symptoms. And they return to their pre-injury state. That's our hope and goal. We want these people to go back to being pain-free, happy and healthy life ideally. However, as we also know, that is not always the case. Right? Oftentimes, and it is so with most of the patients that we see and become familiar with and grow to know and love, they have more of a chronic pain situation. So

they have an injury, they receive that treatment. They have the initial healing but that pain does not seem to really go away or resolve completely, right? So then we have more treatment that we can offer them. They may have already had their surgery or splinting or cast, that initial stuff. With the treatment, we may have injections, occupational therapy, so on and so forth, right? But then still, it seems that with some these patients their pain does not resolve. Then we start getting into the frustration. How come this is not happening? Frustration on the part of the patient, because they are not getting as better as they thought they were going to be. Frustration on part of the provider because their patient is not improving to the degree to which they had hoped. Frustration on the family members, right, because they are kind of caught in the whole picture also with, "you know why this not working is? You know, I thought you would be back to work by now. Things have kind of slowed down. What is this going to do to your career?" We start getting a little anxiety in there, over a lot of those things. Then sometimes depression kicks in. I feel like chronic pain, anxiety, insomnia hold hands together, especially as chronic pain creeps into the picture. And then the pain does not resolve, then what do we do? We are still at the specialist point. Have we been referred to pain management yet? Who is getting involved in this care? Unfortunately sometimes, that referral to pain management and some of these treatments that we're going to talk about does not happen until later into the future. Until all of these other things have been tried and have not been successful. Finally, we end up moving into some of the other treatment. So, where do we go once we become involved as pain management nurses with this patient? I have found that with many of these patients, if you have an opportunity to sit down and talk to them, my case manager piece of me starts coming out into the picture again. I want to go back and see what pieces of the puzzle we have and out of those pieces of the puzzle that we have, who is aware of the piece that they don't own, the pieces that they don't own and how can we kind of put this puzzle together to help these patients get back to functioning beyond that pain? So, whenever I have the opportunity to be involved with the patient I try to talk to them. If there is somebody that we are not figuring out, let them talk to Michele a little bit because I will stew on it and figure it out and try to ask the right questions, maybe, to figure out where we need to go from here. So, history taking is very important. And I don't know if you all heard the talk on motivational interviewing and those sorts of things, but just kind of asking the right question of the right patient in the right environment where they feel comfortable can teach you things about patients that you didn't know existed before. But that are very important and very integral part of their care and puzzle, right?

So, we start out with the basics. What is your current pain concern? What is boarding you today? You know, what brought you to this point to pain management? We want to get that, what's today's concern? What are you hoping to get? A lot of times, they'll tell you, I just want this pain to go away. Of course, we do. We all want this pain to go away. By the time this becomes chronic pain, you get past that three-month mark with your pain, chances are that you may not get back to 200% pain free, right? We want it know what treatments are you currently in? Are you going to occupational therapy? Have you had injections? Are we taking medications? Of those medications, what types of medications are they?

Are we taking narcotics? Hopefully we are not taking too many of those these days, right? Are we taking gabapentin, Lyrica? Sometimes, there are sometimes, we have side effect from these medications we need to be aware of that. We want to know what treatments they have had in the past, not just what they are currently undergoing. Is this a patient who has been sent back to physical therapy and they went three or four times with not much difference in results? Are these people that say well, I got my foot pain under control and now I have knee pain and hip pain and back pain and now I need to go back to physical therapy for those areas that have not been treated yet? What have you done? And of those things that you have done, what has been successful and what has not? Not a whole lot of reasons to send somebody for treatment that has not worked. Because now we have a new provider who has not been there from the ground up. So, sometimes, we have to be an advocate for the patient, so we don't beat our head against the wall and repeat the treatment that has not been successful. Now, what has worked? What has not worked? Are you willing to do that again to return to that treatment? Are there things at home that you can be doing. Did you get a home exercise plan? What type of exercise do you do on a routine basis? A lot of diagnoses that we deal with, especially fibromyalgia, and things like that, you don't need to run six miles, that won't happen but you need stretch, you need to have physical activity. It's good for the physical concerns. We need to move, you know. Emotion is motion. Our acupuncturist says that all the time. Emotion is motion. Some yoga, a little bit of physical activity, go for a walk, whatever you can tolerate but we need to figure out what is the best physical activity for the patient?

We also want to know if they are having trouble with sleep. If we are not sleeping, we are not in the best frame of mind to deal with any kind of frustration or pain or issues that are coming up at work because of our pain and that sort of thing. So, if we are not sleeping, we really need to look into that and make sure that we are getting any kind of sleep treatment that may be necessary. Do we need to do meditation, relaxation, yoga, do we need to get them to the sleep clinic, check for sleep apnea? Are medications interfering with sleep? You really need to take a look at where the patient is on that level. And then, what are these patients eating? Are they getting proper nutrition for healing and for mental health and for ability to exercise and that sort of thing? The standard American diet, you know, we are all into action in the military ,we are all into acronyms here in the military, you know.

Are we getting to the point of suicidal thoughts? Sometimes, chronic pain will take you there. We have known these patients. We have dealt with these patients. We've encountered these patients, sometimes, you are the first person who encounters these patients. You need to know, what are the right questions to ask? How do we get them the help they need?
Are these patients having problems with their sex life, are they able to throw the ball in the backyard or things. Chronic pain affects all aspects in a patient's life and we need know where those things are happening. We also need to know, is this patient able to communicate their concerns, their issues regarding their pains, their degree of pain, their quality of pain? Are they able to let people who need to know just how this pain is affecting all of these areas that we are talking about? Sometimes they need a little bits of help in communicating, right? So we

ask the question, what's your pain level today? Right? But what all goes into that answer? Sometimes it's not just plain and simple, look at the scale and tell me, where your pain is. So many things go into that answer many times, other than just physical pain right now today. So we need to help that patient understand their pain but also help them be able to communicate that pain to the providers and folks trying to help them out.

As we said, the chronic pain known only affects the patient and the providers trying to help them but it affects their family members. Can they play with their kids? Are they able to help out around the house? By the time they get home, they have been dealing with this pain so long, they need to lay down, take a rest and go to sleep. How are their friends responding to this? Are they isolated from their friends because they can't go out and do the activities they used to do with their friends? Now with COVID, anyway, everybody is more isolated. Now you are at home, are in pain, can't participate in family things, can't go out with friends, more isolation, more depression, more anxiety, right? How are their coworkers responding to this pain? Are the coworkers having to cover for them at work? Is their career suffering from this? Do others have to pick up their slacks? Are they having performance issues, ending up with poor fitness reports, unable to participate in PRTs? Most of us in the military have very physical jobs, very physical lifestyles and now that's being hindered. Is that affecting the potential to promote? Is it holding us back from our career advancement? And also, these patients, are they facing a medical board? Sometimes, that is a relief from some of these patients because the stressors are being taken away because we are moving beyond the military. Or sometimes, what the heck am I going to do if I can't continue my career, get promoted, how do I feed my family and if my military career life ends, what am I going to do as a civilian? I still have this pain?

All of these weigh on a patient's mind. You know, I still have pain, nothing is helping, why is that? And then how is the patient responding to all the different responses they are getting? More stress more issues sometimes cause more pain. That does not help our pain response or our pain treatment. Another thing that we want to know from these patients, is what is their ultimate pain goal? Is it realistic? Sometimes, the responses is, I don't want to have 9 out of 10 anymore. I want my pain to be 0 out of 10. I want to be able to do things. Have they had multiple surgeries? Is there realistic expectations of returning to 0 out of 10 pain or not? Again, most of the people that I talk to, that may not be the most realistic answer. We need to have them understand that acceptance of their new self is important. Not that you have to give up. I'm not saying give up. But I'm saying, you need to accept sometimes that 0 out of 10 pain may not be realistic. You know we had this horrible injury or we have been through multiple different deployments and injuries that happen out there. Fortunately, I was not deployed into a situation where I could be injured. But the injuries are just beyond returning from 0 out of 10 pain. We need to get them back to a level of functioning, back to a level of acceptance, back to a level of what can I do? Where I am now and what can I do? Again to, have that quality of life and that acceptance of where they are.

So, through all of this, it gets very easy to kind of get in the mode of, this is another one that's not getting better. This is another one that's not getting better rather than, have we tried everything that we can possibly try to find a combination of things that will bring this patient to a state of well-being, being able to accept where they are and move forward and function beyond the pain? The other thing that we need to think about on the mental health. Through all of this history taking that we do, we need to have a sense of belief of what the patient is telling us. And, sometimes, what the patient is not telling us can be even more enlightening than what the patient is telling us. So when we interview the patient, we say, what is your pain level today? They say my pain is 9 out of 10. So, okay, 9 out of 10. That's like almost the worst pain you ever had in your life, really interfering with all of your activities. This pain is just totally involved in every aspect of your life. Yep, sure is. Sometimes, we are thinking, you don't look like our 9 out of 10 but okay. Really, we need to understand that, to them, it's their perception, that pain is 9 out of 10 and that's what matters. Does not matter what we think, sometimes, or most times of what their answer is. We need to listen to what they are saying and we need to believe what they are saying. Pain is subjective. Sometimes, it's not just the physical pain. Not just the ability to walk or bend or sit or do our job. Sometimes those other factors in there, the impact on the job, the impact on home life, those underlying factors play a bigger part in there than what they will tell you initially.

So you kind of develop these little Spidey senses when you talk to people and the way they answer questions, not just the words they are saying, the look on their face and diverting their eyes from you. That tells you there is a little more to the story. These kind of things again, I'll go back to my friend, Dr. Love. I learned through interviewing some of his patients and talking to them and trying to get them the right pain medication and the right treatment. You kind of develop this sense of what are they not telling me? You as a nurse may or may not be the nurse to discover these things. But maybe they need to talk to a person who can develop those issues more thoroughly.

Under lying factors, I'm talking about it now. You talk to somebody and then you realize that this patient was a real hard charger, quick to promote, next up for the ranks, very successful. And then they get a injury that develops into a chronic injury and they are unwilling to return to the next deployment, return to the ship, to go back to where the injury occurred. You know, maybe they came off a deployment with this injury, those sorts of things and you start seeing that this person who was such a hard charger, willing to do any assignments, do any job, be the first in line to volunteer, all of a sudden, they are hanging back and not wanting to do things. Every time it gets close to going on that next deployment or next ship or PCSing, they ever kind of get real hesitant and their pain level goes up and they kind of, you know, I was doing better but now I'm not so much better anymore. It makes me think what happened out there? What happened on that last deployment? Why are they unwilling to go back? Maybe there was some trauma, some PTSD going on. Maybe there was a co-worker they were working with that was not quite on the up and up as they should have been. Maybe they encountered problems that's blocking them from being out there. The brain is a

beautiful thing. It will protect us from things that they don't want us to experience again, right? So, sometimes, that's not quite as obvious as it is other times. Sometimes, when our pain level is going up, every time it's time to deploy or something, it's not that patient does not want it get better or does not want to go to that next assignment, it's something is stopping them or protecting them. Sometimes, we need to dig deeper into that. If you are not comfortable doing that as a nurse or what have you, we have mental health nurses that can do that. You do nurse-to-nurse call or something like that. We even get these folks, that kind of help and digging into those kind of things. Sometimes, those issues goes all the way to childhood. Sometimes, these patients have something comes up that reminds them of their childhood. Some traumatic events, pain, something like that. All of those things can feed into the chronic pain that they are experiencing now and this pain experience that they are having. Sometimes, with these patients, we'll do, you know, a quick check on the anxiety level, check their depression, do an ISI score to check their insomnia and do the DVRS to check for pain. I got familiar with those in working with Dr. Love and getting familiar with alpha-stim which I will talk about in a little while with ways to talk to people if those scores are a little higher than desirable. So something that you can consider doing, just to do a quick check and see where is your patient on these kind of things? It will give that you indication whether we need to involve mental health in their care if they have not yet been involved. Just some things to consider.

Again, we need to be aware that, sometimes, it’s not just a physical injury and physical pain and the physical treatment and the other straightforward stuff that's the problem. Sometimes and I will say oftentimes, with chronic pain patient, some of these other issues are involved. So now that we know all about the patient and what they have done, and where we want to go with them. Maybe we need to look at the other avenues and where we may want to go. I'm going to go through this list a little bit quickly and then I'm going to come back to some of them that I would like to go in a little bit more details, things that I work with normally in this clinic as the nurse. It has to be things that I'm interested in. I can't just sit at the desk and do paperwork all day. Even as the clinic manager, you end up being involved in clinic and a lot of the administrative stuff. I have to keep my hands involved and go out and talk to the patients, I have to keep a feel for what's going on. So I insert myself into some these programs that I can feel like I can have an effect in.

So, if the patient has not had any acupuncture if that's something that's available to them at your command, that's something that they can be evaluated for and see if that can be of help to them. I have an acupuncturist here that I work with frequently, Dr. Peda Peterson. She is very understanding and influential. Acupuncturists are very open to possibilities of other treatments as well. One of the constraints for acupuncture, at least in our command, this is not a tri care-covered benefit. If you have one in our facility that can treat your patient, that's great. Our clinic here, we have to limit to active duty only because of supply and demand. But if we want to send somebody out in the network for acupuncture, unfortunately, that's an out-of-pocket expense for them. So acupuncture can be amazingly effective and useful but,

unfortunately, there are some limitations who can receive it and how that goes.

So our acupuncturist here provides full body acupuncture and does electrode plants and battlefield acupuncture and has educated many of us on that. Battlefield acupunctures provides some points in the ear where we insert the little tab needle that go on the ASP needles, insert locations on the near and that helps with pain, with anxiety, with depression, different things. Those pains hit a lot of the areas that we are talking about, those points, I meant. So even if we cannot get full body acupuncture, you may have providers in your location that can do the battlefield acupuncture. You don't have to be an acupuncturists to do that but there are some educations and trainings to do that.

Alpha-Stim came to us via Dr. Love. I keep mentioning his name. Again, he has been influential in my career. This delivers a uniquely patented form. Clip on the ear lobe. The current is adjusted to the patient's comfort level. Sit for 20 minutes with that on and that helps induce a pleasant feel. We try the alpha-stim over 4 to 6 sessions. We do the GED 7, ISM 9. So we can see if the device is helping them knock down some of those symptoms and if they like the machine and feel like they can use it at home, show improvement of their symptoms, we can then order that for them. Once again, that is an active duty only benefit here at Portsmouth. We cannot order it for dependents and retirees, currently. The VA is able to offer an alpha-stim. Most of the VA and it's becoming more and more popular. That is another avenue if you have somebody who is retired or getting ready to retire that may be an option for alpha-stim. I'll talk about alpha-stim in a little bit more detail as we go on.

Cupping is another treatment that may or may not been tried with your patient. If it has not, it is worth exploring for myofascial pain. Oftentimes, patients will have their cupping, their acupuncture treatment and then the alpha-stim. When you have them going hand in hand with each other, you get even more beneficial effect. It's not like 1 plus 1 plus 1 is 3. It's like 1 plus 1 plus 1 is 5 or 6. You get better results. Mass annual is an avenue. Yoga, we talked about for stretching, strengthening, breathing, relaxation. Tai Chi is another form of treatment that the patient can receive where they have movement and strength and the mind body connection in those treatments. We used to have a yoga instructor here at the hospital that, when COVID happened and we could not do groups anymore, that program kind of dissolved a little bit. We are hoping to get it back if we can get beyond the numbers here and have the groups again. YouTube has plenty of video for yoga, Tai Chi. I find it more helpful if I can log on and go to YouTube and show them how to find those videos rather than just say, go on YouTube. Sometimes, they will. Sometimes, they won't. If you help them through the process a little bit, they are more likely to engage in those types of things that you are not offering them directly.

Clearly, pain psychology is a very helpful tool, if you have the fortune of having a pain psychologist on site. They are so helpful to the patient. Sometimes, when you just mention it to a patient, they say, what do you think I'm crazy? The pain is in my head? My pain is real. You have to explain to them, we don't think you're crazy. It's just different

avenues to help your mind, yourself through the pain. They have, you know, meditation, self-hypnosis, CET. They have so many different treatments and avenues that they can use and skills that they can teach the patient to help themselves through their pain experience.

Diet modification, we're going to talk in much more detail after a break. I know she mentioned in the beginning of my bio that I went to culinary school. First part of my GI bill, I got my masters. I went to culinary school. Talks about the nutrition affects all the common diseases, cardiac health and diabetes and hypertension and those sorts of things. But there is so much more that nutrition affects that it sound it makes sense but that's something that you think about until you are made to think about it. So, clear in our clinic -- there is a decrease in inflammation and identify foods triggered. So, of course, if you have a lot of chronic inflammation, that will impact your chronic pain, right? We'll go into more details because that's significant in everybody's pain. Yesterday, I went to a lecture on art therapy and pain. I find that helps people with the mental aspect of their pain. And just living an anti-inflammatory lifestyle can be very impactful for these folks and their pain. My general suggestion with these pain patients is that I go over all of these different options with them and I encourage them to try everything. Even if they think that it's hogwash or even if they think it does not work or even if they've maybe been there before and maybe a different setting will help try everything, you know. If it works we shall keep it and keep doing it. Do more of it. Try it. Many people are skeptical of these treatments. And when they try it, some people will say, I never thought that I had would say, this but I didn't believe in it. You never realize what type of an effect it may have on you until you do it. I encourage people to try everything.

I would like to know if you all have any questions or concerns so far about anything that we covered. If you can spring some questions back in the chat box, I can answer those verbally for you. I know one question someone asked me if I attended the function in the culinary classes that I had. I have not I took that program in the culinary institute here in are Virginia. I did the baking and pastry program in 2018. I now have to do all the baking for all of our pot lucks that we have here at the clinic good and bad, sometimes. Sometimes, I'm up late baking cupcakes when I should be eating more healthfully. Any other questions before we move forward? Okay in what would I like to do is go over the elimination diet program that we teach here. I still think it's a very vital component of our program here in pain management. Again, things that you don't know until you know them, right? I didn't realize just how much diet and nutrition can impact pain, chronic pain, inflammation, mood, sleep, anxiety, depression, all of the things that we are concerned about with these patients diet becomes a very integral and important part of our process in trying to help our patient. I have gone through the program myself a couple of times as I'm teaching it. I go through it with the student and I now know that Dr. Fedderson, our acupuncturist here, knows when I'm eating well or not. She knows based on my mood, energy level, my interaction with her, with other staff and patients. It really plays a big role. And as I just said, as a pastry chef, trained as a pastry chef, never really worked as one, but I have that tendency to overdo it on sugar and overdo it on gluten because bread is my ultimate

therapy. Bread making, Bread eating is not so much therapeutic. Once you know these things, you know when you go off the plan. You revert back to what you know. My sleep gets disrupted. My mood changes. My tolerance with stress changes. So it's really a very good program for everybody to try out if you have never done it. And just see what triggers with food you have, and how those are impacting your everyday encounters. Foods may resolve when you follow the elimination diet. Specific foods are foods that are eaten frequently may be related to and lo list of health conditions, including not only digestive problems but headaches, low energy, depression, mood swings, eczema, skin irritation, asthma, weight Dwayne or weight loss and other things such as chronic inflammation and pain. Which, of course, is why we discuss it here. People who suffer from these symptoms over long periods of time may not even realize that they are food related. It's just how you eat and how you have always eaten and you have these symptoms and you don’t put two and two together. It's not until you remove the food from your diet that you start to see these changes occur and start to relate that to possibly the foods that you have been eating. Then, when we start reintroducing some of those foods that we eliminated and the symptoms really crank up, because, after it's been out of your system for a period of time and then you reintroduce it, your body is like, okay, I thought you got rid of that, what are you doing? That's when we start to find our triggers and then we have decision points on what we're going to do with that information, right?

So this program eliminates initially many foods from the diet. I always tell folks when I’m letting them know what they're going to go that we're going to let you eat something. When I go down this list, it looks like I'm going to take everything that you know. With this program, we eliminate alcohol, coffee, beef or any red meat, chocolate, corn, dairy products, eggs, gluten containing grain, peanuts, pork, processed meats, shell fish, soy products and sugar. Really any processed food. What does that leave you in today's world? Our world of grab and go and eating out and picking up what you can along the way.

Well, it leaves you whole, fresh, natural foods prepared in healthful ways. It does bring you back to preparing your foods at home, preparing those foods with healthy oils and cooking methods that don't damage the nutrients and the structure the food that you are preparing. Sound easy, right? The benefit that you received just in the three weeks that you eliminate those foods from your diet, I know, you sleep better, energy level goes up, pain level goes down. Your mood improves and changes. It's enough for most of the students that we've had in class over the past couple of years to continue on the plan, to some extent. Some people didn't even want to add back in anything. Most people will add back in some things, but many, many, many do not add all of these things back into their diet because once they do, they just don't bring them back. They choose to keep them out. So we try to get those triggers. We don't know that until we start adding them back in. Inflammation levels go down when we get these foods out of our systems. The healthy foods that we are eating support a healthy microbiome. All the talk and the rage about healthy microbiome and guts and leaky guts syndrome. When we eat the fried foods and the fast foods and the processed foods, you now, our guts start leaking and some of those things that should normally be eliminated through the digestive track end up leeching out into our

system and causing inflammation in our cells and every cell that we own. We get this chronic inflammation pattern going. Then we have an injury and we wonder why we can't recover from an injury. A lot of time, it has to do with the gut and we can have a great impact on this with healthy eating and eliminating some of these triggers from our diet. So, this plan is dairy free. It is gluten free. Two big offenders right, to inflammation in the body. We can use dairy substitutes. We can have healthy non-gluten-containing grain. There are some option bus we are not going to have gluten or dairy and we're going to eliminate sugar. Sugar is so addictive, it is very hard to get people to eliminate it and keep it out. Plus, sugar is found in so many foods in so many different ways when the foods are processed and we are purchasing them in the store. If you read food labels, every food that you put in your body, you'll find sugar in more products that you ever thought they existed in. Why is that? The food industry knows that sugar is addicting and they want you to buy their products, right? So the food industry will, for flavor, put sugar in food but also for the ability to have you return to purchase their food again and again and again and again. That addictive process that we have with sugar is powerful.

So once we get all these foods out of our system that we know re not necessarily good for us and we reduce that toxic burden. We get the colors and additives and preservatives out of our diet and put in the healthy gut-healing foods in our diet, we can decrease inflammation and decrease pain. One of the pluses for this plan is that it's not calorie restricted at all. Focus on the foods that you can eat. Eat as much of it that you would like. If have you a goal of weight loss, there are different modifications hat you can make. If I have a very unhealthy diet and switch to this plan and try it out, the greater majority of the students that we have had will lose at least a couple of pounds. Some folks, over the six-week course that we teach have lost as much as 25 to 30 pounds. Depending upon how much of a diet it is and a drastic change it is for you, the weight loss sometimes is more dramatic. Not designed for weight loss but, sometimes, that naturally does occur. And then the plan itself also just promotes an awareness of food and what food contains and what food does and how your body reacts to it. So it is a great awareness tool.

We went over the list of foods that we are removing. Let's talk about the foods that we allow on the plan. And we have some wonderful handouts that we give, if anybody is interested in those, I can make sure that they are available to you. And I saw a question pop up. Who teaches this diet course? In our clinic here, we teach in the interdisciplinary group here. Our acupuncturist teaches part of it and I teach part of it and our MA teaches part of it.

So the foods that we do allow on the plan are for protein. We can have plant-based protein and/or animal-based protein. We eliminate red meat and pork. We can have fish but not shell fish. Shell fish in many people is a sensitivity or is allergy provoking. So we can have fish such as Halibut, herring, mackerel, sardines, tuna. You can have wild game, buffalo, elk, lamb, venison. And poultry is fine, anything that you care to have. You have plant-based protein. Legumes, lentils, peas, some protein powders, pea proteins and rice protein. Make sure that you don't

get whey proteins because that's a beef-based pro team legumes, we encourage, sup as bean sprouts, Greenspan, hummus. Refried beans as long as they are vegetarians are okay. Many have pork products in them, so you have to make sure that's a vegetarian refried beans. We do have dairy alternatives. We can use coconut milk, almond milk, Flaxseed, hazelnut. Make sur that those are ungulate, so unsweetened. We can have seeds and nuts. They are great snacking food. We don't want people to go hungry. Almond, cashews, pecans pine nuts, any variety of those, pumpkin seeds, those are all good, all allowable. And then for we want to do prime Earl Avocado oil, extra virgin olive oil or coconut oil. Also Ghee we allow. That's clarified butter. You can clarify butter yourself or buy ghee. Take thicker butter, let it boil down, let it cool completely, you see a layer of debris, I call it forming on the top. If you scoop that off, you have a very clear, vibrant yellow liquid that's left over, that's ghee or clarified butter. You can do it yourself. So that's what we use for our healthy oil.

Then we have a list of starchy and non-starchy oils. Roasting vegetables is a great way to get that whole natural flavor out of a vegetable. If you never had roasted vegetables, I strongly encourage it. You find your taste buds will change where you actually taste and appreciate the actual flavor of the food that you are eating, rather than the preservative and the salt and the other things that are added to the foods. Vegetables range in artichoke, Bok Choy, beans, peppers, shallots, onion, any vegetables that you can buy natural is allowable on the plant. Starchy vegetables are also allowed. You may want to limit how many starchy vegetables you have, if you want to lose weight. Avoid the potatoes. Fruits are allowable. We encourage natural fruits, not fruit juice, even if you juice it yourself. We want to maintain steady low sugar levels in order to keep our hormone levels and not have the blood sugar and Insulin going up and down and up and down throughout the day. If you eat the whole natural fruit, you get the fiber that comes along with that which helps balance out that sugar hit that you get from the natural sugars. Berries have so many antioxidants and helpful nutrients in them. Berries are strongly encouraged. We have kiwi, Papayas, Melons, any of those are allowable.

Beverages is where people get into a quandary with this plan. We encourage water, water, and more water. A person should drink enough water equal to the number of pounds that you weigh divided by two and you take that number and put it in ounces. We do not allow coffee, soft drinks, don't want artificially sweetened drinks. Unsweetened coconut water, green teas for those who like a hot beverage in the morning. We want that unsweetened. We do funnel a little bit and allow raw natural honey, no more than three tea spoons in a day or pure maple syrup. Not pancake syrup. Pure maple syrup. No more than three teaspoons in a day if you absolutely need to have something sweet in your beverage or food, even.

We strongly encourage herbs and spices. The flavors that you can get out of fresh herbs and spices is amazing. It's better than any artificial flavoring and preservatives and stuff that you find in a food that's prepackaged for you. We go through different recipes and tricks to flavor your food naturally. The condiments that are allowed would be mustard as

long as there is no sugar added to it and vinegar. If you can make your own ketchup, make your own barbecue sauce but make sure those are sugar free. And like I said, you are getting used to reading levels. If there are words on ingredient lists on labels that you can't pronounce, you should not be eating that food or words that you don't know what it is, you should not be eating that food on this plan. So we take these foods out of the diet for a total of 21 days. None of these foods can be eaten for the first three weeks. The full 21 days. Usually, we when we start we have our class run once a week for an hour. Each week, we are doing those virtually now for people to log on. Say, for example, on Wednesdays from 11:00 to 12:00, you meet with the instructor and your group virtually. The first day, we go through some of this material that I'm putting out today and let people know what they may and may not consume while they are on the plan. Then, we give them that first weekend to kind of get rid of what they have in their house and do their shopping and fill their home with those foods that they're going to be able to eat. I usually tell people, get rid of anything that will call your name from the kitchen. So if you love chips or you love ice cream or those kinds of things, you need to get rid of that before Monday when we're going to actually start the plan. Then we tell them, you can eat it, donate it, give it away, throw it away. But if it's going to be a temptation to you, get it out of the house. And then the foods that you're going to eat throughout the plan are foods that you're going to prepare at home so you have to do a little bit of planning ahead and to some shopping. You know, what is going to be my breakfast, lunch and dinner, what kind of snacks am I going to have available? What am I going to have in my pocket or desk or back pack for emergencies when I'm really hungry or have to stay late at work or my original plan didn't work out. You want to have some backups that you can keep handy so that you don't grab something that you should not have. Pretty much, if you reintroduce these foods before you had that three-week healing period, you kind of start yourself back over at step 1. Once you get that inflammation back and going up again, you need to remove that food and get back to a healthy eating for 21 days before you start to reintroduce the challenges system. So, what can we eat in place of some of the things that we would normally eat while we're on the plan? We talked a little bit about milk alternative or dairy alternative. Some people like hot cereals in the morning such as a cream of wheat. You can do oatmeal’s. Rice cereal with an almond milk or coconut milk. You can have quinoa flakes. Some are made with quinoa now, rather than corn or wheat. Apple cinnamon porridge is something that they can suggest the you can find that in the stores. We have gone out in the stores to see if some of these that I'm suggesting are realistic. And think about things that you can purchase or consume, they do not contain added sugar. That becomes part of the problem, part of the problem, sometimes. With your oats, though, or rice cereal, you can fruit to that to sweeten it or add that little bit of honey or pure maple syrup that you are allowed to have on 0 the plan. Instead of bread, crackers and pasta, you can find some gluten-free bread. We discourage too much bread to begin with because of the other preservatives that are in there to add to shelf lives. We encourage oats, quinoa, those are a little more expensive but they are there.

For eggs, store-bought egg replacer, you can use or you can blend one tablespoon of flax or CHIA pediatric. That's not like an egg you would

have for breakfast but if you would like to put that in another breakfast to have that hold together. If you are making a turkey meat loaf, use that in place of an egg as a binder. We do not allow peanuts. We do not allow peanut butter. Peanut allergies are rampant in this country. We do suggest an Almond butter or cashew butter. Make sure when you purchase those that there is no other ingredients. Should say roasted almond, period. Sunflower oil, sugar, the reason they stay nice and creamy is because there is added oils in them. There are ice creams out there. I'm an ice cream addict. There are Almond milk base but again, you have to watch out for sweeteners. Instead of soft drinks, we like the sparkling mineral water. Instead of coffee and tea, we like herbal teas or green teas. Instead of butter and margarine, us the coconut oil or gee that we talked about. We already talked about sweetener. You can use vinegar, spices, salt, pepper, cinnamon, thyme, turmeric, any herbs and spices are allowable on the plan. Many add some anti-inflammatory properties and some pain relieving properties. So not only are they tasty and make your meals very palatable and delicious, but they help combat some of the plans that we are doing for. When we are eating the healthier foods and foods that are, no doubt anti-inflammatory effect at well as avoiding them with anti-inflammatory effects, there are foods such as fatty fish. Your wild caught salmon, tuna, sardines, they have a great balance of fatty acids in their Omega three. The Omega 3 fats from grain-fed animal’s fat. Dark leafy greens such as kale, broccoli, cabbage, high in fibers so that helps balance the blood sugar that we were talking about. And they also have pro inflammatory molecules called ACETOKYN and there are gluycnelae. Vegetables, bell pepper, Berries, grape, cherries, and plum contain anti-inflammatory. Extra virgin olive oil and olive contain nutrients called Polyphenol. Moist heat looking temperatures, are the best, such as crockpot cooking, roasting. They bring out the anti-inflammatory products in the foods that you are cooking. And spices such as turmeric, ginger, oregano, and cinnamon, all have anti-inflammatories properties. And when used in combination, they intensify those properties.

Okay. So, have I convince y'all that you can still eat, even when you are eating anti-inflannel and eliminating all of these foods that we are talking about? I get so excited about whole natural favorable foods. That's one the reasons I went to culinary school so I can learn to cook be more confident in the kitchen. My brother would take ingredients from the fridge and would make delicious meals. I would have to go by a recipe and use exact amounts and is afraid to experiment. Fresh herbs and spices are the way to go every time. At the end, just put a little pinch of salt on the end to wake up that flavor rather than cooking with a lot of salt during the cooking process that really brings out the flavor. So if we can make it through the three weeks without eating all of these foods that we've asked you not to eat, then, we have to do our reintroduction period. And this is when, you know, if you really like the student can pick whatever student they want to introduce first. Whatever they have been missing the most. A lot of times, that's eggs because breakfast takes a big hit when we eliminate these foods. We ask them to do within the first day of reintroduction, eat as much of the product as you choose, as is tolerable in that first day. We have eliminated, let the body rest and heal. Now we'll reintroduce the food and hit the body hard with it. We want to know what the body is going to do. They may

reintroduction and have no problem at it, keep that foot and let them enjoy it. The reaction can be anything from GI upset to gas to diarrhea to head aches, increased pain, sleep disturbance, mood changes, any of those things count as a reaction or sensitivity to that food. If any of those things happen, we're going to stop that food, again, let the body calm down before we try to reintroduce the next food. Usually, it takes three or four days for that food to clear the system and be ready for the next food. Many people get very upset when they have a reaction to a food that they are reintroducing. So we reassure them if they keep that food out of their diet for three to six months, let the body heal, continue to eat the healthy food, then try reintroduction again. They may be able to tolerate that food to where they may have it occasionally. What this whole plan does, as we proceed through the reintroduction phase, one item at a time, organic, grass-fed free range those are the worlds that we want. Mold free coffee. My mold-free coffee, you want reaction to that food, not something that's been added to it. You proceed through the process and it gives you the information moving forward, what reaction are you having to these foods and what are you willing to tolerate? I say this because I know that dairy is not my best friend but I also know that I'm going to eat ice cream on occasion. When I'm in that mood where I want ice cream I don't want to hear about coconut ice cream or almond milk ice cream. I want to have a smaller amount than I used to have and I will suffer through the reaction for a couple of days. I do have chronic pain issues and it does kick that up a little bit, too. I'm selective when I do that. Sometimes, when you have that emotional crisis or that best girlfriend over for talk time or whatever, you're going to do that to yourself. So, it gives that you decision-making point, the decision ability, what is it worth to me? What is it worth to my pain recovery? What is it worth to my daily living. I think we talked enough about diet. If you want more about it, A'riel knows how to get in touch with me.

In conclusion because I'm running close on time here. With our pain patients and our chronic pain patients in nursing, we want to make sure that we are getting as much of the story as we can to talk about modalities and providers that we have available to them. Sometimes, it takes one person taking a look at the whole story rather than a lot of providers each looking at the piece of the story to get that to happen so that history is vitally important. And then having your resource guide resources that are available to you at your command, where you can direct these patients to get thesis the next most important step.

We also want to help the patient to have a realistic output. They may not return to 100% of their former self. So we can focus on what they can do rather than what they've lost. What they can still do now, what they can do differently, maybe they have to modify or maybe they have to do their activities in moderation. So that they can have that whole experience. They can have that healthy, happy satisfying family life. They can get back to some semblance of a work life. Focus on the positive. Just let them know that you believe in what they are saying, you don't think they are crazy and you don't think they are malingering. There are a couple of out there that might be. For the most part, the compassion and the support and the truly caring about these patients will help them succeed in addition to the different modalities that you're going to offer them.

And then in my opinion, it does not hurt to share a little bit about yourself. We can always relate to somebody's story some way or another. We have our own little bit that you can put in there. You don't have to tell your deep, dark secrets. Allow them to be vulnerable and share your stories with them. That will keep them coming back when they get stuck. That will keep them using you as a resource potentially but that will keep them progressing and functioning beyond their pain.

The elimination diet plan that I have, I'm going to put my e-mail address up here. You ca e-mail me and I can send that to you and also provide it to A'riel and Amy. Whichever way is best for you, let me know and I'll get that information to you. There is a comprehensive guide, food list and recipe packet with a shopping guide that we used for our class material. That's a functional medicine program that Dr.Pedderson brought to us. It has been my pleasure talking to you all today. I wish we could have been more interactive and have back and forth. That would have made easier to season your questions. You have my e-mail address there. I am in global. If you have any questions for me, I'm happy to reach out. Thank you so much. Have a great day.