Concussion Podcast Transcript

**Mandi Gearhart:** Hi and welcome to the SAS podcast. Today we are going to talk about concussions. We're going to dispel some myths about concussions and talk about what to do if you have a concussion. But first, and information for you, concussions are more common than you probably think they are. SAS works with students to put in place temporary accommodations to help students during their recovery period.

You might be surprised to know that it is not just athletes that suffer from concussions. Concussions can also happen even if you don't hit your head particularly hard. If you have symptoms of a concussion, you should seek medical attention.

Given the right circumstances, anyone can get a concussion. On average, SAS staff sees 17 students per year with concussions between the fall and spring semesters.

I'm joined today by Mary a UMaine student and Brianna from Cutler health. Mary is a second year grad student in the School of forest resources, who's had three concussions since starting at UMaine.

Brianna is a certified, licensed athletic trainer who works at Cutler health center as a resource to New Balance recreation center and other active individuals on the main campus. She provides event coverage for club sports provides management of concussion injuries and provides baseline impact testing. So Mary, why did you want to work with Sal to help everyone at you may know more about dealing with concussions.

**Mary:** Mandi. Thanks so much for inviting me to the podcast, I'm really excited to be here to talk about this today. Because I think it's really important to talk about how concussions affects people in our community and because the science on concussions is evolving so rapidly there's always more to learn.

So I want people to be aware of how concussions can affect folks. And I also want people to know what some of the ways are that you can try to manage your symptoms and protect yourself from future issues if you do get a concussion.

So the reason I'm here talking about this today is that I've had three concussions since starting at UMaine. I got my third concussion last August and I ended up with what is called post concussion syndrome. And that is basically what concussion symptoms are called when they don't resolve after a few weeks.

And of course, I made several mistakes that made my symptoms much worse. And I ended up having post concussive syndrome for about six months.

It's really impacted my ability to enjoy being in grad school and at times. It's been really disempowering and isolating

I actually feel really lucky that my PCS hasn't been worse because there are definitely people in the human community who struggle with PCS for much longer, but it's still frustrating to think that's so much of what I've gone through was completely avoidable.

**Mandi Gearhart:** So what are you planning to share with us today?

**Mary:** I want to share three of the mistakes that I made that others can totally avoid. I want to share three of the strategies that have really helped me to get better.

And Brianna has played a big role in treating me and has kindly agreed to cover important topics that I don't know much about because she has so much more experience with this topic.

**Mandi Gearhart:** Great, what’s mistake number one.

**Mary:** It's definitely not seeking care immediately. There are times when seeking care can be kind of hard like if you're by yourself or you don't really know where to go or you don't really think that you've like been hit so hard that it warrants the effort of going to seek care. For example, I was on a trip overseas when I hit my head again last August and I didn't want to bother the family, with whom I was staying because they were busy getting ready for a wedding. So I tried just to take care of myself without making a big deal out of it.

So I should have gotten to see a doctor. But the thing that I did do, right, was I recognize my concussion symptoms and I avoided, making them worse.

So, for example, my phone screen made me dizzy and I stayed off my phone. I didn't leave the house because the noise of traffic and conversations was really overwhelming. I just basically chilled out and slept.

**Mandi Gearhart:** So Brianna, is there anything you want to add

**Brianna Woodworth:** Um, yeah. Thanks. Thanks for letting me join you ladies today. Mandi had kind of mentioned that, you know, concussions are not just for athletes and you know, to reiterate what Mary was saying is, is important for an athlete or student to seek medical attention early on in the process.

Because it can really help guide them to the next steps for what they need to do and the support that they're going to need academically, as well as, you know, to help them heal quicker and faster.

**Mary:** I did find some recent research suggesting that resting too much after the first 48 hours have past can actually make your recovery longer. But there's also research showing that your recovery depends on your gender and what your injury was and what sort of medications you're taking etc. Which is why it's so important to get medical advice from a qualified professional because what I did, might not be best for everyone and it might not even have been best for me.

For situations where you really can't help right away. The rule of thumb that I was given in my wilderness first responder course and I'm actually really interested to get your input on this Brianna.

I did this course through wilderness medicine associates and they emphasized that brain swelling can occur in the first 48 hours, which explains why my symptoms didn't pop up for almost 24 hours. And they also mentioned that a concussion that knock someone out has the potential to create more serious complications than a concussion that does not cause a loss of consciousness, but you should still take all concussions seriously, even if your only symptom is a headache.

**Brianna Woodworth:** I think that's what makes concussion so completely unique and difficult for medical providers to kind of handle sometimes. Because symptoms can vary across the board. I mean, some people can have lingering symptoms for a long period of time and quote unquote got a small hit to the head.

Whereas others can be knocked unconscious and then be able to recover quicker from their symptoms so so much goes into patient history. And you know how many episodes that they've had, you know, hits to the head, the types of symptoms, they're developing how they're caring for themselves along the way. So it becomes a complicated mix of problems that needs to kind of be addressed all at once. So it's really unique because no two concussions are exactly alike

**Mary:** Right. And I know we had discussed that like, not everyone shares the same symptoms like for me, my symptoms were halos around the lights, sort of like that multicolor halo that you'll see around the moon. Sometimes it's kind of like a rainbow. It's sort of like that but around lights that you normally wouldn't expect to show that. That was one of my big symptoms.

**Brianna Woodworth:** I think sometimes too Mary, sometimes people don't know what the symptoms are or a mild headache. They're like, Oh, well I hit my head, and they might not relate that to a concussion. So sometimes people are hesitant to seek medical support because they're not really clear if they had a concussion or not.

And they don't know who to go to for a resource. So I hope the students here at the University of Maine can find support services here at Cutler health center. We are primary care office. But as Mandi said, you know, said during the introduction. I work with club and intermural athletes or anyone active here on the university campus.

So they can seek me out for resources and we can put in the referrals and place to figure out where the best place professionally for them to go is.

**Mary:** I think that's super important.

**Mandi Gearhart:** So Mary, given the variety of resources that are available. Why didn't you immediately seek care?

**Mary:** Um, well, when I got back to campus. Which would have been the time to do it. Getting back from my trip and needing to start school again. I was really excited about starting school again. I was excited to jump into my thesis research and my other projects and my social life. I wanted to slow down absolutely as little as possible. And I felt like I was already doing pretty well. I felt like there was nothing I could do to make me get better faster besides resting, which I now know is completely wrong.

But because my symptoms were already lessening and I had handled my first two concussions just fine. I thought that I knew the drill. Which brings me to mistake number two, which was rushing back into student life.

I'm super social I love to go out and drink and be with my friends and all that. Like, I know a lot of people on campus do and drinking alcohol and not getting enough sleep, are the two things that are 100% guaranteed to set you back after a concussion. And the tricky part about avoiding those in a university setting is that it can make you feel left out when your friends are having fun.

And this is when you figure out who your real friends are and take some time to do things like bake or other activities, meditation, that you never really had time for before

**Mandi Gearhart:** And Brianna. I know in our office, we talked a lot about routine. Can you talk about where that importance is

**Brianna Woodworth:** Oh yeah routine with college students tend to be pretty challenging you know when I when I asked them about their sleep habits or their food habits. A lot of times there's a lot of inconsistency, just because of the college schedule and lifestyle that that they lead.

So, you know, consistency with a routine is a really important thing we discuss. You know, what time do you get up in the morning. What time do you go to bed at night. Is their consistency when you're getting your meals and you're not dropping your blood sugar and how are you taking care of yourself so

Compliance is a very tricky thing with this population. But really, especially in Mary's case, for example, was symptoms lasting such a long period of time. You know, compliance can be a little bit tricky because you want to make sure that you're introducing things back into their life, such as baking or meditation. T hings that can be safe and they can reintroduce back into their schedule and routine without compromising their symptoms.

**Mandi Gearhart:** So, Brianna. How have you seen other students handle concussions on campus like what symptoms should prompt them to seek treatment and where can they go, I know we said Cutler health but

**Brianna Woodworth:** Yeah, I think, you know, probably some of the more common symptoms are, you know, headache, you know, difficulty with focusing, you know, especially like screens. A lot of people comment on driving or balance problems, feeling like a little vertigo. But they can go on to include speech impairments or vomiting.

So it's important to differentiate between mild concussion symptoms and something a little bit more serious. So if you're having the speech impairments and you're having the difficulty with balance, extreme headache and vomiting with numbness and tingling those types of symptoms I would seek emergency response. So, you know, calling EMS or getting to the ER and making sure you're properly evaluated to rule out any other types of conditions.

On campus. Of course, we do have Cutler Health Center, which can go ahead and evaluate people, five days a week here at the health center myself as an athletic trainer can also see students that present with symptoms.

If you're, if you have concerns over the course of the weekend we have several walk-in care facilities here in the Bangor area. Here near campus, we have Helen Hunt in an Old Town and then in the Bangor area we have several different walk-in care and weekend services available for students.

So those are some of the resources here local there are opportunities for referrals for other necessary medical professionals become involved if in fact the case becomes a little bit more long standing.

**Mary:** And I think like, right, that's why it's so important for other people to be involved and given the symptoms you just described. In my experience when you are concussed you are not in a good position to judge whether or not you are concussed and need help.

**Brianna Woodworth:** Tell my athletes that all the time. I'm like, you know, it's really not the athlete or the individual that might recognize things. They come in with their roommate oh my roommates act in a little funny. Can you check them out. They said they hit their head. You know, it might be a little bit of resistance on on the students part to present with a problem because, you know, they may not feel like they need that that kind of evaluation.

**Mary:** And also, like some of the symptoms can be really subtle, like you said, like my roommates acting a little funny that could mean just like being really emotional when they're not normally. Like small things like that, concussion symptoms that really deserve care and treatment, even if they aren't the traditional like seeing stars. But can be kind of hard to miss. I think are easy to miss rather

**Brianna Woodworth:** Well, in that college population. You do have a population experimenting with alcohol. And so sometimes that can complicate you know symptoms as well, especially if a concussion happens when when somebody is drinking

**Mary:** Hmm, hmm. Yeah, I feel like drinking could also make it easy to commit mistake. Big mistake number three mistake with a capital M, which is hitting your head again if you've already or if you're already recovering from a concussion.

And so, the first month I was back on campus. My sometimes aren't that bad. I thought I was managing them fine. In reality I wasn't taking my concussion seriously enough like I was still having the occasional beer. And in hindsight I would have been more recovered from my concussion when I did hit my head very soon afterwards and my symptoms wouldn't have been as bad. Even after hitting my head again if I'd taken the first concussion really seriously.

And so the way that story goes, so I hit my head like August 23 and by the beginning of October. I was almost entirely better. There were moments that I forgot where I was recovering from a concussion and that meant that the other people around me also forgot. So my boyfriend and I were joking around one day. And this is like a really stupid story and it does not make me look good, but I just want to emphasize that like, you really have to be careful because it's the stupid little things that can really get you so he thinks it's hilarious that I'm really ticklish. I don't.

But literally, the moment that he was about to say stop tickling me before I hit my head again I managed to back into a windowsill, especially because so many of the like windows and walls and rooms in like the Orono/Old Town area or slanted it's, you know, kind of easy to have an accident, like that.

**Mandi Gearhart:** Did you hit your head hard that time?

**Mary:** No, not at all. Once you've had a concussion it's easier to get the next one, if it occurs within the relatively short timeframe and that relatively short timeframe, depending on who you are. It could be months or it could be years.

So it's better to just be extra cautious. \Your brain becomes less resilient immediately after concussion. You have these little gray cells and little white cells, and I'm not a neuroscientist, so I don't understand this as well as someone like that. Would I definitely would encourage people to go look up some of that research, but for my understanding those cells have the capacity to stretch once.

And eventually over time, they'll regain their full strength. But if you stretch them once and then you ask them to stretch. Again, that's really bad news bears.

So no, I didn't hit my head hard my boyfriend didn't even hear my head make contact. But by the end of the next day my headaches were back. I was having trouble reading. I couldn't use a computer screen at all. I mean, even just having long conversations became exhausting. Yeah.

**Mandi Gearhart:** So, Brianna. How long would you say it usually takes for someone to recover from a concussion.

**Brianna Woodworth:** Oh goodness that that varies so much. It's such a difficult, you know, cookie cutter answer to offer. You know many of my concussion patients will recover fully, you know, one to two weeks, we do have what's called a return to sport kind of policy and a program that we have to offer. So we want our athletes to be symptom free before we can start reintroducing them back into certain activities and first and foremost is academics.

Once they’re symptom free, can they sit in a classroom, can they stare at a computer screen, and we want to progressive we start individuals with that process. Instead of just going from, Oh I had a concussion all my symptoms are gone to, you know, sitting in 15 credits worth of class.

We want to slowly progress someone back into that. So, you know, it's constant symptom tracking. So once we start reintroducing somebody into that, that can take you know days or it can take weeks until they are fully kind of returning back to their normal activities. So around about way, there's no correct answer. There's no necessary timeline again so much of that is dependent on the symptoms that we're presenting and the patient history and how complex it is

**Mandi Gearhart:** Gotcha. Everybody's different.

**Brianna Woodworth:** Everybody's different.

**Mandi Gearhart:** So Mary, if you and the people around you had been more aware of what would happen if you hit your head again do you think it's possible you would have recovered much sooner?

**Mary:** Yeah, we would have been a lot more careful. I think we're at least I hope.

It was such a stupid and totally preventable accident but the reality is that stuff like that happens all the time. So if you've had a concussion in the past few months like these are the things that I would like to go back in time and tell myself. Talk to your friends and family, anyone who's around you about how important it is that you not hit your head again. Like in school forest resources obviously there are a lot of lab based classes outdoors, make sure that people in your lab know not accidentally bump into you, or things like that.

Be extra cautious when you're in an unfamiliar space or a new situation because I think this also played a role in me hitting my head again. It wasn't like a space that I was super familiar with, like, you know, you could find your way around your own bedroom in the dark, probably, but could you find your way around someone else's house in the dark, probably not. And the third thing would be to avoid risky activities.

I was actually like considering skiing last winter. Which, in hindsight would have been a huge mistake because I probably would have given myself a second concussion anyway, even if I hadn't hit my head in October. So, possibly, you know, who knows, but maybe hitting my head again in October prevented me from hitting my head and a more serious way again, this winter.

And of course, like maybe risky activities are more okay if you don't have that history of concussions or something. But like that's a decision that really needs to be made with Brianna with your doctors and don't make it on your own.

**Mandi Gearhart:** And how did you know to go see Brianna after your symptoms came back.

**Mary:** I got lucky. One of my professors actually told me that I couldn't come back into the building until I saw someone and my friend recommended that I go to Bri. And like I said before, part of being concussed is that you can actually assess how bad you are so friends and professors can play a really big role in getting people to seek treatment.

**Mandi Gearhart:** So Briana, how can you and others help students with concussions or post concussive syndrome?

**Brianna Woodworth:** Oh yeah, as an athletic trainer one of the things that we do for our club athletes is called baseline concussion testing, we use a program called IMPACT here.

So each of our club contact club athletes participates in a computerized baseline test. So basically, it puts a number score associated with cognitive activity as a baseline. So it's something that we can utilize if somebody is concussed and are showing symptoms, we can use the impact test post concussion symptoms to kind of evaluate when a good timeline to return them back to academics and return them back to sport. So that's one of the techniques that we have here available to the students have UMaine. I rely heavily on a symptoms tracker.

It's something that I really like to do daily with my athletes or very regularly. I want to know, on a scale of zero to six. Zero meaning nothing and six meaning severe, where your symptoms are living. And that can be very dependent day to day like some of your symptoms can fluctuate.

The goal is that we see those symptoms lesson and, you know, lower the number, lower over a period of time.

But in Mary's case sometimes they were all over the map, you know, she could come in one day and be in mild symptom categories and the next, you know, show very differently and present very different

So I do like the symptom tracking it really helps dictate kind of what I do for first symptoms I treat headaches, a lot with, you know, cranial sacral and some massage techniques trigger point release with the neck. That's how I like to handle a lot of my headache type symptoms or, you know, if you're having ocular pain, things like that.

A lot of the things that I talked about with my athletes are diet. You know what type of anti inflammatory agents are you putting into your body and are there foods that we can utilize. You know, what is your overall diet look like is it filled with carbohydrates and fatty foods or can we make a shift into healthy leafy greens. You know, and improve the vegetable intake, you know, in the body. So those are the some of the things that that I talked about with the athlete.

Sleep is another big one. A lot of athletes will present with sleep challenges. Either they're sleeping longer periods of time or their frequently waking through the evening or they have a difficulty getting to sleep at night. That's another big one.

So just talking again about those those day-to-day routine kind of habits that they can get themselves into and, you know, there's a lot of pressures with students to return to the classroom. They may not feel like they have support from their instructors.

So just educating them and encouraging them to reach out and seek those resources. But first, have a candid conversation with your instructor because they can't help you if they don't know what's going on. And oftentimes, the student won’t reach out to the instructor.

I do issue a note that just ask the students and the instructor to have a conversation of what is coming up academically for course load what can be altered. How can it you know be modified just for a period of time because those first couple days can be very crucial to that compliance piece necessary for healing.

**Mary:** Yeah, I want to point out to that Bri just how flexible, you are in working with your patients was really helpful for me because I personally did not feel like dragging my body to campus every day to check in with you. But doing it over phone or zoom or email made it really easy for you to like, figure out what sort of treatment was necessary for me. I should also point out that I didn't follow through with your suggestion that I come to Student Accessibility Services right away. I already had really good communication with my professors and I didn't think that I needed to get SAS involved. That was a huge mistake.

Mandi I feel like you and others at SAS have so many tips for easing back into work. Tips for managing like physical and emotional symptoms as well. I really wish I had learned all that sooner. And Bri the other thing that you did for me, besides, treating me and then validating my symptoms, which meant a lot was that you referred me to the Bangor concussion clinic.

**Mandi Gearhart:** So the Bangor concussion clinic. Brianna can you tell us a little bit about what they offer?

**Brianna Woodworth:** S yeah the concussion clinic is a multi disciplinary approach to treating concussions. So first you're going to start with a general practitioner, you're going to talk a lot about your history and your symptoms. There's lots of different angles that a general practitioner that specializes concussions can take and perhaps it's prescription medication, but it's also additional referrals. Another individual that you will meet at the concussion clinic is a physical therapist.

They can work with you, different exercises. For example, for eye tracking or vertigo. Some symptoms of dizziness that sometimes athletes have and then the third person is a counselor. Somebody that, an LSW, licensed social worker that can work with you on other emotional or cognitive challenges that you're having

**Mary:** And I also got to see do a doctor of osteopathy, I think, is that correct Brianna, and she was able to do some more, um, the massage type work that you had been doing on me, which I also want to be really helpful. I was really surprised at how helpful. The PT exercises were like there is so many things that you can treat with PT that I had no idea. Like, for example, I am still having some difficulties driving on bumpy roads. And my neuropsychiatrist was just like, oh, that's because your vestibular system still isn't recalibrated like go back to your PT.

So I guess that's one thing that I wish I had known going into the Bangor concussion clinic is that some of the stuff that they offer can be really effective. But it does take months of being consistent to like see those good results.

**Mandi Gearhart:** So I want to also note that Cutler health is able to arrange taxis for off campus medical appointments, which not everyone is aware of. So if you need to see a doctor and they are not on campus and you're already working with Cutler, you can ask them to arrange for taxi at no cost to go to your appointment.

And also remember that there are additional counseling and PT service, PT or physical therapy services on campus as well.

**Mary:** I'd also like to point out that because the science on concussions is changing so quickly and not every doctor's office is going to be able to offer you like every single possible treatment. Like they might not discuss with you the diet things that Briana really emphasized. There are also other treatments that some people have found to be effective for their concussions like acupuncture.

That may or may not help. And they can also be expensive. So you really want to think through what sort of alternative therapies might be worth pursuing. And what might not

**Mandi Gearhart:** So you said there's a lot of new research can each of you speak a little bit about the information coming out about concussions.

**Brianna Woodworth:** I think what's unique about the research is coming out is we're tracking it so much more. The, the challenge with the brain is we don't really know how concussions impact the brain until many, many, many years later. And so we're finding information now about, for example, in the NFL that they sustained concussions years ago.

So we're finding out more information all the time about symptoms and how they can impact long term brain function. We're also finding really cool techniques and ways to track you know collision hits, or you know assessed force or whiplash. So we're doing that with a lot of different scientific techniques like in the helmets. And we're measuring that we're getting a lot more data than we ever have.

So it's just an evolving science. We know so much more now than we did five years ago and five years before that. I mean just the way in my schooling, the way I learned to treat concussions versus how I am now is vastly different. It used to just kind of be a cookie cutter response.

Oh. Okay. Well, Mary has a concussion. She's out for five days. And it was just as simple as that, you know, and now we definitely treat them more case by case and following them more regularly and we found that to be a way more effective way of helping people heal quicker and safer.

**Mandi Gearhart:** Right. So it sounds like there's a lot of information out there. And if you have a concussion, I imagine you know it's it's hard to focus on what's the most important. So what did you find are the things that you feel people should discuss? Or what helped you

**Mary:**. So it's really cool that we have so much more science about concussions and there's not enough about, in my opinion, just actually treating symptoms. So some of the things that I heard that really helped me manage my concussion symptoms are things for which there's some limited clinical evidence, but a ton of anecdotal evidence. So one big thing that I did was I cut down on sugar and gluten. Which was hard because baking was my go to concussion activity. So cutting down on sugar and gluten. made it hard to watch Great British baking show, for example. Which I highly recommend as a concussion show because it's like really positive and nobody talks to wildly and anyway, that's my recommendation, but also make sure you're getting plenty of vitamin B and D too.

There's some evidence that they may help your brain. But there's a lot of evidence that they just generally help you stay positive and energized. Which can make a huge difference in your recovery. My neuro psychiatrist who I should have seen a lot earlier.

I would highly recommend seeing a nerve psychiatrist if you are experiencing long post concussive syndromes and that's not someone who's available through the finger concussion clinic. She was emphasizing how recent research has described that if you're feeling down or feeling stressed out about not being able to manage your concussion symptoms. Those like hormonal feedback loops in your body will actually slow down your recovery. So not a good cycle to get yourself stuck in.

And another thing that can sort of help you avoid getting stuck in that cycle is really light exercise, like light all in capital letters exercise, stop as soon as you start to feel weird. But studies have also shown that people who move around in the first week after concussion can sometimes recover faster than those who only rest and that's probably because like exercise helps you to rebuild the blood vessels in your brain that you asked me, you got concussed

So definitely something to discuss with your health care providers.

**Mandi Gearhart:** Cool. So like an exercise like going for a walk or doing lunges in your living room. It also sounds like a good opportunity to spend time with friends.

**Mary:** Totally again be really careful not to do exercises or walking places where you could hit your head again. But I found it to be a really great opportunity, like you said, to connect with friends and they were a huge source of emotional support and positivity. Something else that I found that has actual scientific backing was deep breathing. Meditation spending time in nature. They help to decrease the stress levels and stimulate your brain in ways that help you heal and seven ways that keep you from healing.

**Mandi Gearhart:** So where can you learn how to do deep breathing or meditation.

**Mary:** There are loads of videos online and some yoga studios offer classes in those things of course now everything's online. But someday when we will return to campus, the Counseling Center on campus probably has additional resources and they could probably I imagine meet over tele health but honestly, just listening to the birds outside my window and finding shapes in the clouds that was really helpful for me. Being outside helped me to feel less trapped. I really struggled with anxiety and feeling down in the months that I had those concussive syndrome. And that's really common. And that's a really valid like mental health symptom, and it should be managed as a concussion symptom.

So like I said, like reaching out getting treatment for that in addition to just doing your own good self care like actively reaching out to other people who can help you, is really important.

**Mandi Gearhart:** So when you reached out to SAS, how did that conversation go?

**Mary:** Oh, I remember being really impressed with all the tips and tricks that you had for just managing symptoms, but I think I had originally contacted you because my first exam was coming up and I had this lofty notion that I would be all prepared to take my first exam. Just as if I had never gotten a concussion and I was not there. So my professor again, another professor urged me to come to SAS.

**Brianna Woodworth:** I think the add on that married to so many students have increased stress levels when they have a concussion related to academics. So it's really important to have SAS available to you so they can hHelp with those accommodations needed to ease that stress and anxiety, you know, and reduce you know that academic load or that stressor related to grades and test taking.

**Mandi Gearhart:** We do have our own internal protocols for concussions, but we recognize that everyone's different and everyone is affected differently and everyone's class load is different. So we are professional staff members are always happy to meet with someone and discuss what's going on with your classes and figure out how to help you best manage your academics will also taking the time you need to heal.

So SAS also has some equipment that we can loan out we have sets of glasses and various sizes that are tempted yellow that are specifically designed to help people with concussions as it takes down the contrast on screens and just real life, to help you heal quicker but still be able to engage in day to day activities. We also have some colored inserts that you can put over paper, which also again helps take down the contrast and helps reduce eye strain.

We want to thank you both so much for joining us today and talking about Mary, your experience with concussions and Bri, your experience in helping students with concussions, it's so important to us that students are able to succeed at UMaine. We hope that by listening today more students will seek us out sooner so that we can help them.

**Mary:** Thank you so much. Mandy. It's meant a lot to be able to turn my experience. Hopefully into something more positive for others. So, and I appreciate all that you did to help me through this semester as well.

**Mandi Gearhart:** So the last bit is that we encourage students to set up an appointment as soon as they receive a diagnosis. This can help students get accommodations swiftly and reduce stress while they heal. Some students have also found that using an E reader can be helpful so they can listen to their textbooks and SAS staff can help you get accessible versions of your physical textbooks, so that you can use them with an E reader.

Thank you both for joining us and help get the information out there about concussions. Thanks for listening. And remember, as always, SAS is here to help.