

CAREGIVER CORNER

A Brother's Call for Action

By Daniel George

My name is Daniel George, and I am 15 years old. My brother, Jacob, sustained a severe traumatic brain injury (TBI) 10 years ago while on a Halloween hayride. He was an average 8-year-old when the accident happened. Because of the injury, Jacob has quadriplegia, cannot see, cannot speak, cannot eat, and requires around-theclock care. But that does not mean he cannot communicate. Jacob smiles and laughs when we make jokes and spend time with him. We know he can hear us and comprehend the environment because he reacts to things by laughing. He enjoys our company, so I watch TV with him, take naps with him, tell him jokes, and try to help my parents take care of him as much as I can.

I was so young when the accident happened that the life we live right now is my norm. I do not remember much about Jacob before the accident because I was only 4. What I heard from my family is that he was lovable and would always read and play with me when I asked. I still find it hard to zoom out and understand the real depth of the effects on my family and me.

I want Jacob to communicate because that is the best way for me to get to know and hang out with my brother. Laughter is great, but hopefully, that is only the tip of the iceberg as far as communication goes with Jacob. Not all



Daniel George (left) enjoys quality time with his brothers Jacob and Davis.

of our efforts have been successful. We tried to have him communicate with his eyebrows. I put aside 30 minutes a day to try to teach him to raise his eyebrows as "yes" and leave them where they are for "no." The results were inconsistent, and we decided his tremor might be affecting his responses.

Now we are trying to use a Brain-Computer Interface (BCI) to communicate with him. Ms. T. Vaughan, a research scientist at the National Center for Adaptive Neurotechnologies, showed me how to set up the BCI for Jacob. If we can use the BCI regularly, hopefully, I can work with him a little bit each day and see if it is a viable means of communication. If he can communicate, he can tell us when he is hungry or when he is uncomfortable.

INSTITUTE FOR REHABILITATION

According to the Brain Trauma Foundation, 2.5 million people sustain a TBI every year. I believe that research on BCI will have the potential to improve the quality of life for people with TBI. It might be some people's last hope, and giving back that bit of life they lost would be wonderful. My goal is to get to know Jacob more, make his life easier, and help the millions of people that are in the same situation as my family.





IN THE COMMUNITY

Love Your Brain: Fostering Resilience through Community-Centered Yoga

By Sarah Thomson, Research Assistant, Center for Neuropsychology and Neuroscience Research, Kessler Foundation



Gina Pachkowski instructs students in a "Love Your Brain Yoga" class at her studio in Cranford, N.J.

After a traumatic brain injury (TBI), it's common to feel isolated, misunderstood, and helpless. Survivors often face new physical, mental, and emotional challenges and struggle to find a truly sympathetic and supportive community. Thanks to the *Love Your Brain Foundation*, people who have experienced a brain injury now have access to a welcoming community with resources to improve well-being.

Love Your Brain was co-founded by Kevin Pearce, a former American professional snowboarder who suffered a TBI while training for the 2010 Winter Olympics. After his injury, Kevin lost his ability to pursue athletics, and with that, his sense of purpose. Feeling that his injury defined him, he founded an organization to support individuals like himself who were looking for a sense of belonging in their postinjury realities. The organization offers a variety of community programs, including a unique yoga program that is expanding nationwide.

Supported by scientific research and backed by local communities, *Love Your Brain Yoga* is a six-week program designed for individuals with brain injuries and their caregivers. Through the implementation of gentle yoga, meditation, and group discussions, the program provides survivors with a tight-knit community in an empowering space. Classes are designed to improve quality of life, resilience, and cognition, and aim to increase positive affect and life satisfaction in individuals with a range of injury severities.

Gina Pachkowski, owner of Alluem Yoga in Cranford, N.J., is a certified *Love Your Brain Yoga* instructor and avid supporter of the program as an outlet for individuals with brain injury. "Since I opened my studio 10 years ago, I've always promoted my belief that yoga is for everyone. It warms my heart that through *Love Your Brain*, we're able to bring yoga to people who may not feel comfortable practicing elsewhere." Gina discovered *Love Your Brain Yoga* after a close friend's daughter sustained a TBI. In 2017, she partnered with the organization to offer classes at Alluem Yoga.

As an instructor, Gina strives to ensure that the class environment is accessible to everyone. "We close the curtains, dim the lights, turn off the music, and focus on slow, repetitive motions. There's an incredible sense of inclusivity in the class, and we keep everyone's personal limits in mind."

Gina and her Alluem team continue to receive positive feedback from students, and she feels humbled by her experiences as a program instructor. "My students might be having a really good day or a really bad one, but they still show up each week and put in the effort. That represents such strength and courage, and we know they'll see lasting benefits, even after they leave the program."

Alluem Yoga offers a six-week *Love Your Brain Yoga* program at their Cranford Studio four times per year. The program is also available at Honor Yoga in Pennington, N.J. All classes are provided free of charge. Please visit www.loveyourbrain.com/ yoga to learn more about *Love Your Brain* and to find a location near you.

NURSE'S CORNER

Stay in the Know About H₂O

By Daryl Blewett, MSN, RN, CRRN, and Bonnie Tillman, BSN, RN, CRRN



Often, we do not think about water until we feel like we ran a marathon and have an unquenchable thirst. What happens next? We chug a few glasses of water as if it's the last time we may ever see water again.

There are many excuses we use as to why we do not drink enough water. We have all said them:

- "I just don't have enough time."
- "I just don't like the taste of water."
- "I'm not thirsty."
- "It's hard drinking the recommended amount of water each day."

Did you know that when we are thirsty, it is our body telling us it is dehydrated? Waiting for our body to tell us when we are thirsty only increases the chances of having severe dehydration. We need to drink water before that happens.

Why Is Hydration So Important?

Every cell of our body uses water. It is essential for our body to function at an optimal level. Water helps transport oxygen and nutrients to the brain and acts as a cushion and lubricant for our brain tissue. When we are dehydrated, staying focused is more difficult, and our short-term memory functions are impaired, as well as recall for our long-term memory. Clearly, staying hydrated is critical for supporting our brain function.

Signs and Symptoms of Dehydration

Our body gives us signs if we are dehydrated. Watch for:

- Increased thirst
- Dry mouth
- Feeling drowsy or tired
- Decreased urine output
- Darker urine (more yellow)
- Dry skin
- Dizziness

How to Stay Hydrated

Staying hydrated means drinking plenty of water each day. Many health professionals and national experts recommend that we drink eight 8-ounce glasses of water (or about 2 liters) each day. Your water intake may include milk, juice, and herbal teas, which are composed mostly of water. Even caffeinated drinks - such as coffee and soda - can contribute to your daily water intake. However, water is your best bet because it is calorie-free, inexpensive, and readily available. The foods you eat can also help you meet your fluid needs. Many fruits and vegetables, such as leafy greens and watermelon, are almost 100 percent water.

Everyone, including our loved ones with brain injuries, needs to drink enough water to support our bodies. After all, our bodies are made up of 55 percent (female) to 60 percent (male) water, with some organs and tissues being up to 90 percent water. So, what is the moral of this story? Drink, drink, drink.



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LISTEN TO PODCASTS FROM THE 2019 TBI CONSUMER CONFERENCE

Our TBI Consumer Conference, *Moving Forward: Improving Emotional, Physical and Cognitive Health after Brain Injury,* was held on Friday, Sept. 27. All speakers were recorded, and the podcasts are now available at **KesslerFoundation.org/tbi-conf-podcast.**

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