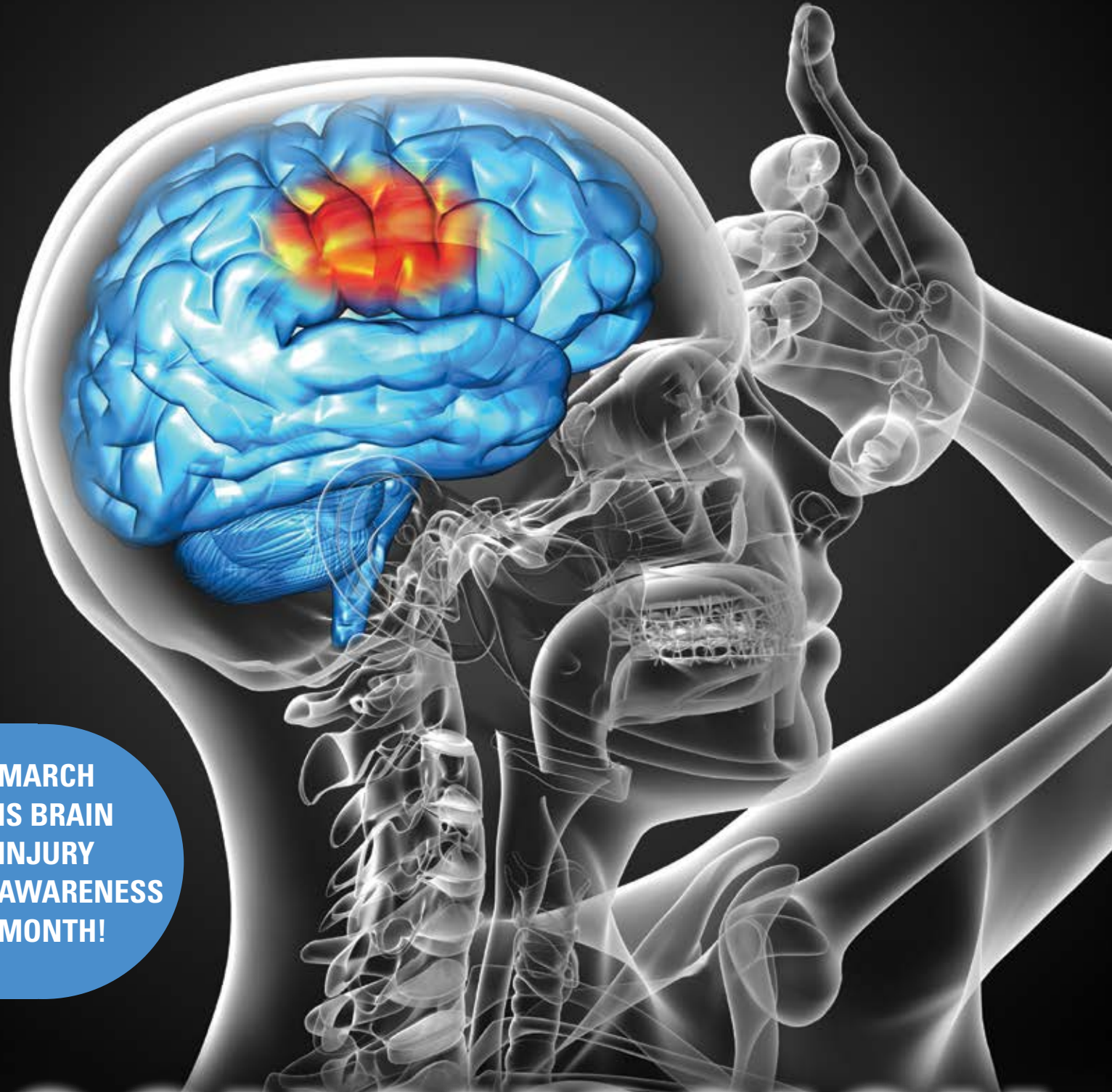



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THE **C**HALLENGE!



**MARCH
IS BRAIN
INJURY
AWARENESS
MONTH!**

CONCUSSION



How Nutrition May Play a Role in Concussion Therapy

By Marie Spano, R.D.

Currently, the recommended treatment for concussion is limited to rest, allowing the brain to recover. But growing evidence suggests that consuming certain nutrients – particularly EPA and DHA omega-3 fatty acids – may support injured brains as part of a treatment protocol, reduce acute effects of concussions, and promote recovery. Furthermore, current research supports the inclusion of a dietitian or nutritionist in the team of health professionals treating a concussion, which is welcome news since nutrition is a non-invasive way to provide intervention and metabolic support during recovery.

EPA and DHA, which are omega-3 fatty acids found in fish, fish oil, and algae oil supplements, increase fluidity of cell membranes and reduce inflammation. They enhance cerebral blood flow, which may be reduced to a month or longer in athletes who recover slowly. Cell membranes are like gateways allowing substances to enter cells or blocking their entry. When cell membranes are more fluid – and therefore less rigid – they perform better, opening the gate for nutrients to come in. DHA, in particular, makes up 97 percent of the omega-3 fatty acids in the brain and is essential for normal brain functioning. Several animal studies have shown that EPA and DHA supplementation before or after a traumatic brain injury (TBI) helps limit structural damage and decline in brain functioning.

Anecdotal evidence also suggests that omega-3s may help persons who sustain concussions and other TBIs. For example, the family of Bobby Ghassemi, who suffered head injuries resulting from a devastating car accident partially credits his recovery to fish oil. His treatment was inspired by the recovery of another individual with TBI, Randal McCloy, the sole survivor of a West Virginia mining disaster. Omega-3s were used for McCloy's treatment.

There is no clear consensus on the optimal intake of EPA and DHA prior to or after a concussion, but many health professionals recommend consuming between 250 and 500 milligrams per day for general health. Unfortunately, more than 75 percent of Americans do not have healthy levels of omega-3s. Unlike some other nutrients, our bodies cannot efficiently produce EPA and DHA omega-3 fatty acids. Fortunately, there are other easy ways to make sure you're getting the recommended amounts, including:

- Consuming fatty fish varieties that contain high levels of omega-3s, including salmon, tuna, mackerel, and herring, at least twice per week.
- Taking a daily omega-3 supplement providing EPA+DHA (be sure to look for high-quality fish oil, algal oil or krill oil supplements in your local grocery or health store).

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VERMONT

The Brain Injury Association of Vermont (BIAVT) Board President Bob Luce and Deborah Fournier, team leader for the Dartmouth Hitchcock Medical Center Brain Injury Clinic, were interviewed on the popular Vermont Public Radio call-in show, Vermont Edition, on Jan. 6, 2016, at noon and 7:00 p.m. Bob was asked to discuss advances in concussion science. The call-in volume during the live show at noon was a good indicator of the heightened interest in the issue of concussions and concussion treatment. BIAVT distributed social media messages to promote “Concussion” being shown at local theatres.

VIRGINIA

Brain injuries caused by sports have been a hot topic in the local press recently because of the new Will Smith movie, aptly called “Concussion.” The Brain Injury Association of Virginia (BIAV) took advantage of the buzz around this film by submitting an opinion editorial to the *Richmond Times Dispatch*, which circulates to about 89,400 people daily. The intent of the op-ed was to publicize BIAV, encourage readers to contact us, and stress that seemingly mild injuries can have serious impacts in future years. To read the full article, please visit http://www.richmond.com/opinion/their-opinion/guest-columnists/article_950b54f7-747c-57e9-9d62-bdfc257ca1f6.html/.

Following the op-ed, BIAV has scheduled three events in the coming months that will highlight concussions and offer the public more information. On March 5, 2016, BIAV will hold its annual conference. BIAA President/CEO Susan Connors is the keynote speaker. Andrew Smith and Amber Turner from Virginia Tech will present on mild traumatic brain injury. On April 23, 2016, BIAV will host RVA Field Day, a family-friendly fundraising event that will educate the public and raise awareness about brain injury. In May, BIAV will host a sports concussion webinar led by Dr. Greg O’Shanick, renowned neurologist and Medical Director Emeritus of BIAA.

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Her Concussion Vs. His Concussion

consideration for her symptoms, acute care, and recovery plan. Her journey back to health can be helped by the correct diagnosis, sex-specific care, education, and the proper support systems at home, school, and work.

Katherine Snedaker, LCSW, is executive director of PINKconcussions. In 2013, Katherine founded PINKconcussions, a nonprofit focused on female concussion from sports, abuse, accidents, and military service. She produced the first National Summit of Female Concussion and TBI which was hosted by Georgetown University Medical Center and is planning a patient retreat summit in late 2016, and an international summit in the United Kingdom in 2017. She is a researcher, educator, and advocate who speaks and presents internationally on female concussion research along with her own personal story of brain injury.

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How Nutrition May Play a Role in Concussion Therapy

- Eating and drinking DHA omega-3-fortified foods and beverages, including milk, 100% juice, and yogurt.

If you or someone in your family sustains a concussion, ask your doctor about including EPA and DHA in your recovery regime, and consider adding a dietician to your team of medical practitioners. Dieticians can offer advice on combining certain nutrients to support recovery. Medical evaluation and treatment is important. Nutrition therapy is a potentially valuable, yet often overlooked, part of the recovery plan.

Marie Spano, MS, RD, CSCS, CSSD is a nutrition communications expert and one of the country’s leading sports nutritionists. She is co-editor of the NSCA’s Guide to Exercise and Sport Nutrition and currently working on another book for Human Kinetics. She has also served as a spokesperson for numerous clients and is a national speaker.