A vast amount of research supports the use of exercise to maintain a healthy body. But what good is a healthy body without a healthy mind? Despite evidence showing that exercise has a positive effect on brain health, the most common form of treatment for neurological diseases and conditions is pharmaceutical. One of the most common and costly neurological diseases in the United States is Alzheimer’s disease (AD). This progressive neurological condition falls under the broad umbrella term, “Dementia,” which is defined as cognitive impairment and memory loss that is severe enough to interfere with normal daily life. As the sixth leading cause of death, AD affects over 5 million people in the U.S. and that figure is projected to triple over the next 30 years. This fact is staggering, considering that an analysis published in *The Lancet Neurology* suggested that nearly 25% of AD cases could be prevented with the correct diet and physical activity. Medications prescribed for the prevention of Alzheimer’s have shown no evidence that they protect the brain against damage, degeneration, or impairment of function. On the other hand, a large number of studies indicate that regular exercise decreases the occurrence and progression of dementia.

How, exactly, does exercise do this? First, we need to understand some age-related changes that occur in the brain. Several factors, such as a change in blood supply, systemic inflammation, and structural changes are to blame for the decline in cognition. Exercise combats this decline by increasing blood supply to the brain, decreasing inflammation and actually increasing the structure of the brain. Exercise also stimulates the release of a protein called ‘Brain-derived neurotropic factor (BDNF),’ which mitigates brain degeneration. Studies have also found that exercise increases grey matter, which is the brain tissue responsible for processing information. Lastly, it appears that the hippocampus, which is the area of the brain responsible for new memory and learning, increases in response to exercise.

Even though exercise has been shown to be a promising preventive method for AD, it is vastly underutilized. While the optimal exercise prescription is still unclear, the guidelines for physical health and wellness are a good place to start.

- 150 minutes of moderate exercise per week (30 minutes/5 days a week)
- 2 days of total body resistance training (as part of the 150 minutes)

November is Alzheimer’s Awareness month. Do your part and share this information with a family member, friend, or colleague who may not know about the benefits of exercise on brain health.

Become aware and share!

References:
The 80/20 Rule: Eating Well Simplified

Q: What is the 80/20 rule?

A: The 80/20 rule is a new approach to eating that encourages nutritious food choices 80% of the time, while leaving room for indulgences in the remaining 20%. Instead of being a “diet” with the potential for failure, the 80/20 rule is a realistic guideline that allows flexibility and long-term sustainability. The rule can work for anyone -- omnivores to vegans -- whether for weight loss or gain. It is exemplary of the newest 2015 - 2020 Dietary Guidelines for Americans, which highlights the importance of implementing a healthy eating pattern across the lifespan.

Q: How do I follow the 80/20 rule?

A: Unfortunately, most of us are not the best at estimating, whether it’s calories or portion size, so the 80/20 rule can be difficult to apply to everyday life. The easiest way to follow the rule is through MyPlate, a visual tool designed by the U.S. Department of Agriculture which presents graphic representations of meal composition. To achieve a balanced meal, half of your plate should consist of fruits and non-starchy vegetables, such as green beans, carrots, lettuce, or onions; one-quarter of your plate should include starches/grains, such as rice, beans, potatoes, or corn (make at least half of your grains whole grains); and one-quarter of your plate should consist of lean protein, such as chicken, turkey, or fish. If you are able to mirror MyPlate for a majority of your meals, you are on track.

Q: What else should I know about the 80/20 rule?

A: Unlike many regimens, the rule can be broken. It is a guideline meant to be incorporated into your lifestyle. No one (dietitians included!) eats perfectly 100% of the time and some days will be better than others, including those days when you eat nutritiously only 20% of the time and indulge in the other 80%. That’s OK! Adapting to the 80/20 rule is a process, with less about individual foods and more about the bigger picture. By adopting the 80/20 rule, there is nothing to lose and everything to gain: a balanced diet, a healthier and enjoyable relationship with food, and reaching individual health goals that can be maintained in the long-term.