

## THE BENEFITS OF FIDGETING

Many of us know someone who seemingly cannot sit still - that person who is constantly tapping, bouncing, or shifting in their seat. Fidgeting is an entirely unconscious action for many people and is characterized as small movements often made by the hands or feet. As children, I am sure many of us recall being scolded by a parent for moving around too much when we were instructed to sit still. As adults, we may end up disrupting our peers as we mindlessly fidget while sitting at our desk. While this fidgeting can be annoying to others, the “fidgeter” is reaping some great health benefits.

One of the most apparent benefits of fidgeting is an increase in caloric expenditure. Any type of physical movement will activate the body’s machinery and increase the number of calories burned. An innovative study published in the *Journal of Clinical Nutrition* in 2000 examined just how much of an effect fidgeting can have on our daily energy expenditure. The researchers found that even with very low intensity activity (fidgeting), daily caloric expenditure was significantly elevated compared to being still. This has a huge impact on strategies for weight management in people who sit all day, such as office workers. These individuals now have the opportunity to maintain a healthy weight and improve their health without interrupting their work.

Blood flow is another component of health being compromised by extended periods of sitting. Studies have confirmed that extended sitting contributes to impaired endothelial function (the endothelium is the inner lining of blood vessels which is crucial to blood vessel health). However, a 2016 study in the *American Journal of Physiology* found that fidgeting prevented this damage. It showed that tiny movements made while sitting were sufficient to maintain correct function of the endothelium through shear stress (force against vessel walls as blood flows through the blood vessels). This is a very important function and based on this research, can easily be maintained with the small physical activity of fidgeting.

Another benefit of fidgeting is its effect on the mind. It was once thought that fidgeting indicated a lack of attention to the task at hand, however research has begun to explore this further. A 2015 study in the *Journal of Abnormal Child Psychology* examined how hyperactivity affected attention in children with attention deficit/hyperactivity disorder (ADHD). Previously, it was thought that preventing a child with ADHD from moving around would be the best way to maintain attention, however this study found the opposite. Children with ADHD used movement as a release for their excess energy, which resulted in greater attention to tasks in this study. This suggests that allowing children with ADHD to move while in a classroom will help them by improving attention and therefore they will retain information better.

Fidgeting is classified as very low-intensity physical activity. This kind of activity is an example of Non-Exercise Activity Thermogenesis (NEAT), or calories burned through life activities that are not exercise. Use of HOVR, which is NEAT Certified through the Mayo Clinic, is an easy, fun way to fidget and increase NEAT calorie burning, which can fight “Sitting Disease” and help with sustained weight control. Research indicates there are many other benefits as well. HOVR is ideal for office settings or classrooms and encourages fidgeting throughout the day. It is very encouraging that small, mindless movements throughout the day can make significant contributions to our health. HOVR is a convenient and effective way to reap these benefits.

## References

- Levine, J. A., Schleusner, S. J., & Jensen, M. D. (2000). Energy expenditure of nonexercise activity. *The American Journal of Clinical Nutrition*, *72*(6), 1451-1454.
- Morishima, T., Restaino, R. M., Walsh, L. K., Kanaley, J. A., Fadel, P. J., & Padilla, J. (2016). Prolonged sitting-induced leg endothelial dysfunction is prevented by fidgeting. *American Journal of Physiology. Heart and Circulatory Physiology*, *311*(1), H177-82. doi:10.1152/ajpheart.00297.2016 [doi]
- Sarver, D. E., Rapport, M. D., Kofler, M. J., Raiker, J. S., & Friedman, L. M. (2015). Hyperactivity in attention-Deficit/Hyperactivity disorder (ADHD): Impairing deficit or compensatory behavior? *Journal of Abnormal Child Psychology*, *43*(7), 1219-1232. doi:10.1007/s10802-015-0011-1 [doi]