THE IMPORTANCE OF MOVEMENT

Why "Fidgety" Is Good for the Modern Office Workforce

By Stefanie J. Nobriga

We know from research that frequent movement can help prevent injuries, especially considering the static positions we often find ourselves in within modern work environments. Knowing this is only half the battle.

If OSH professionals are trying to reduce workplace injuries and do not actively encourage this movement, even if they provide the best adjustable ergonomic equipment and training, they will not help prevent injury.

Science shows that the human body is not designed to be static for long periods; we are meant to move. As Gummelt (2015) observes, physical activity lowers blood pressure, regulates blood sugar, lowers resting heart rate, controls body fat, improves immune function, increases muscular strength and endurance, improves cardiorespiratory functioning, increases flexibility, improves mental functioning and improves the quality of sleep.

Movement, as it turns out, is good. This is where the concept that "fidgety is good" stems from. So, why is this message not being heard?

Less Movement, More Injuries

According to Bureau of Labor Statistics (BLS, 2014), office workers, including support staff, administrative and management, make up more than 16% of the workforce in the country. OSHA (n.d.) cites work-related musculoskeletal disorders (MSDs) as among the most frequently reported causes of lost or restricted work time. In fact, MSD cases account for 33% of all work-related injuries across the U.S. (OSHA, n.d.).

These numbers have been consistently high for some time, with the total cost of MSDs across the country reaching $45 to $54 billion annually. With years of experience and research, we have learned that technological advancements, modern conveniences and the age of the internet have, in part, contributed to the soft-tissue injuries that office workers consistently suffer, and that what should be an inherently safe work environment is rather hazardous and wreaking havoc on our bodies (CDC, 2020a).

As children and young adults, we are taught and encouraged throughout school to move around frequently. Once we enter the office workforce, we immediately become sedentary.

Historically, most office tasks required some movement and getting away from one's desk from time to time. Today's modern office workers can send emails, participate in meetings and order lunch without ever leaving their desks.

Anecdotally, we have heard of employees who are encouraged to stay in the office (and at their desks) with lunches (breakfasts and dinners) catered and delivered directly to each person. Some jobs such as call centers, dispatch and customer service centers require workers to stay at their workstations for hours at a time without movement.

All of this inactivity is not only causing an alarming rise in obesity rates nationwide, but it is also a contributing cause to consistently high soft-tissue injury rates in the U.S. According to a science advisory from American Heart Association, prolonged sedentary time can be bad for the heart and blood vessels regardless of the amount of physical activity an individual participates in (Young et al., 2016). The report also states evidence suggests that sedentary behavior could contribute to excess morbidity and mortality. In other words, inactivity is killing us (CDC, 2020b; Galka, 2016).

High-Tech Solutions Can Evolve Problems

Ironically, today's ergonomically designed and adjustable equipment far surpasses what we had access to only 10 years ago. We understand how to correct the problems associated with poor workstation fit and design, and we have done an excellent job of educating and training on proper posture at the workstation.

Technology has provided the ergonomic community with more options, including input devices, keyboards and other equipment. This has been both a positive and a negative in the world of ergonomics. With so many input devices and keyboard options, it is difficult for the average human resources or operations manager to know what will work in various situations. The same can be said for sit-stand workstations. They are not all created equal and that, in itself, can cause more problems than it solves. For more information and assistance, consult an ergonomic consultant. However, in general, if a sit-stand workstation is available, the key is to balance the stand-to-sit ratio. Different opinions and studies exist on sit-stand ratios. According to Callaghan (as cited in Bezruki, 2016), the ideal sit-stand ratio lies somewhere between 1:1 and 1:3.

Hedge (n.d.) suggests "20 minutes sitting (in a good posture), 8 minutes standing (for sit-stand workstations) and 2 minutes of standing and moving (gentle stretching, walking, etc.) as a ballpark goal for organizing work." Nearly all ex-

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FIGURE 1
STRETCHES AT THE WORKSTATION

Here are some sample stretches, inspired by the author's training as a yoga instructor and ergonomic consultant, from the program created for and provided to clients.

Wrist Mobility

This stretch benefits the muscles in the forearms and wrists.

Seated: (1) Stretch your right arm out at shoulder height, bending at the wrist so your fingers are pointed down. Use your left hand to gently pull your fingers toward you, feeling a stretch in the top and bottom of the forearm. Repeat with fingers pointed up. Mirror this stretch with the opposing hand.

Seated: (2) Place your right hand on your chair with your fingers pointing toward your right inner thigh. Keeping contact with your chair, use your body to gently leverage the stretch throughout your forearm. Switch between your palm and the back of your hand. Mirror this stretch with the opposing hand.

For each arm:
- **Hold the stretch for 10 to 30 seconds with your palm down.**
- **Hold the stretch for 20 to 30 seconds with your palm up.**

Hip Flexor

This stretch helps get rid of tension and stress in the lower body.

Seated: Position your legs shoulder-width apart, with your toes pointed out and feet planted firmly on the floor. With your elbows lightly pressing your inner thighs outwards, allow your chest to gently drop down toward the floor. Be sure to keep your back straight and abs engaged. If your body allows for it, try to rest your palms on the floor. You should feel a stretch in the inner thighs.

Hold the stretch for 10 to 30 seconds.

SIX FIDGETY EXAMPLES

Here are six examples of applying the "fidgety" concept to typical office activities.

1. **Take calls standing and walking.**
2. **Initiate walking meetings.**
3. **Take the stairs instead of the elevator or escalators. If you have to use an escalator, walk it. In addition, take the long way when walking to the printer, bathroom or a meeting.**
4. **Meet with colleagues in person instead of sending emails.**
5. **Take walking breaks (2 to 4 minutes of walking for every hour of sitting).**
6. **Break frequently; adopt a pattern of movement that is consistent and habitual.**

Even if you have a sit-stand workstation, do not assume that you have done all you can. Standing is not a substitution for movement and movement is essential, not only for individual health and wellness, but also for workforce productivity.

perts and professional ergonomists agree that we must pay attention to our bodies and frequently move before fatigue and pain are realized. From consultations with clients, we recommend programs that encourage periodic movement coupled with "rest" cycles, based on the author's 20 years of work as an ergonomist and yoga instructor integrating yoga and ergonomic principles.

We have found that not enough attention has been drawn to being fidgety and the importance of movement throughout the day, and this is likely the most important element to preventing injury for the office workforce. Adopting a campaign for fidgeting is simple; more difficult are sustainability and, of course, human nature.

Working with clients over the years, we see sit-stand workstations abandoned after about 6 months of use. In addition, traditional workstation users tend to ignore movement guidelines due to deadlines and apathy. In most cases, sit-stand workstations are provided to employees without guidance or essential equipment such as antifatigue mats, footwear guidelines and recommended sit-stand ratios. Moreover, we found that many people tend to skip over recommendations for a sit-stand coaching program and movement pattern guidelines.

Professional insight and client interaction have identified improper use of sit-stand workstations in many workplaces. Multiple studies on the negative impact of inactivity have led office workers to opt to stand all day although still failing to move or change positions. This can lead to lower extremity discomfort, pain, joint loading and even injury, and can be just as harmful as prolonged sitting (AHA News, 2016).

We encourage a 6-month (minimum) metric-based coaching program for any workplace behavior modification to stick long term and to ensure habitual and proper use of sit-stand workstations. The same can be said for traditional workstations. Shifts in work habits, schedule changes or work location can throw off consistency.

Getting back on track can be difficult; therefore, providing support and encouragement is essential to a consistent movement campaign. After all, we are not just talking about worker productivity and corporate culture. Movement (or the lack of it) affects the very thing we need to be effective in anything we pursue: our wellness. The bottom line is to move more, listen to your body and remember that "fidgety is good."

The "Fidgety Is Good" Program

The author has developed the "Fidgety Is Good" program over the course of 25 years of close observation of workforce behavior. The goal of the program is to mitigate individual injury rates that may result from poor ergonomics, increased sedentary time and static postures during the workday.

Key Points of the Program

- Consultation with an ergonomic specialist is the essential first step for

workstation design, providing employees one-on-one evaluations or, at the least, reactively in response to a complaint or injury.

•Conduct proactive ergonomic assessments to identify and address problems for the workforce and during new hire orientation and processing. These assessments can be in person, online or virtual. We have found all of these options to be effective.

•Implement a fidgety plan for staff:

1. Encourage staff to engage in 2 to 3 minutes to recover from 30 minutes of sedentary time (e.g., repetitive work, static postures) or adopt the Hedge (n.d.) movement cycle for sit-stand workstation users.

2. Encourage staff to shift and move throughout the day by changing tasks and positions frequently.

3. Move from stand to sit and, if possible, move to collaborative spaces or alternative work areas.

•Encourage employees to use wearable devices that track stand and walk times; create competitions with nominal awards.

•Implement movement campaigns, consisting of rest, stretch and recovery that encourages therapeutic movement, to stretch tight hip flexors from prolonged sitting, and hand, wrist and finger mobility exercises to relieve fatigue from repetitive keying (Gudmestad, 2007).

Figure 1 shows several sample stretches, inspired by the author's training as a yoga instructor and ergonomic consultant, from the program created for and provided to clients.

Formal stretch programs by department are an excellent way to recover from sedentary time (including long periods of repetition). Consider developing an in-house stretch video and stretch guides that can serve as an instructional tool for employees.

Water intake is vital for the maintenance of good health and wellness. Of course, people get plenty of water from food and other beverages, but it does not hurt to drink more, especially in heavily air-conditioned offices where dehumidifiers and filters are working hard to prevent mold and static electricity.

Remember that movement not only counteracts fatigue from static postures, it also wakes up the body and mind by increasing blood flow and boosting metabolism, which helps us to be more productive throughout the day (LaMothe, 2015). The "Six Fidgety Examples" sidebar offers a few suggestions for applying this concept to typical office activities.

Four Essential Tips to Build Your Own Plan

Want to build your own plan? The first consideration is how often you should move and what type of movement is effective. Weighing all of the research from academic assessments and field observations, we have found a practical approach for planning that is reasonable and sustainable for nearly any office situation:

1. Fight "sedentary time." The minimum recommendation is 2 to 3 minutes of movement for every 30 minutes of sitting or standing. If you have a sit-stand workstation, consider adopting the Hedge (n.d.) sit-stand guideline of 20 minutes sitting, 8 minutes standing and 2 minutes moving or stretching in 30-minute cycles.

2. Encourage 16 position transitions in the 7.5-hour day, a goal that is easier to achieve when you adopt the Hedge (n.d.) guideline, along with walking and stretching.

3. Think "balance." If you like or need to stand more, try not to stand for more than 20 to 40 minutes at a time without changing positions. An alternative to standing or sitting can be "perching." Perch stools have become popular over the past 5 years and provide another option, but they are not for everyone.

4. Be adaptable and flexible. Remember, you are working with people, not machines. Not everyone will want to stand or perch. Allow individuals to change the plan to meet their own physical needs and work requirements.

Conclusion

Adopt some or all of the fidgety plan: find neutral postures (by adjusting the chair, keyboard, mouse and monitor); avoid contact stresses to the wrists, forearms and the back of the legs; obtain or provide adjustable equipment; move frequently; and above all else, listen to your body. Be an advocate for yourself and the workforce, and avoid becoming a soft-tissue injury statistic. **PSJ**

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