Movement Motivation: The Case for Promoting Movement in Office Workers at CSU

Thomas Sneed, CSU East Bay

INTRODUCTION

For decades sitting at a desk has been the norm. But thanks to science and research we now know that sedentary behavior causes a host of health and wellness problems, from poor circulation to premature spinal disc degeneration, and is detrimental to our long term well-being. An estimated 70% of the U.S. workforce sits in offices each day and the average American spends around 95% of the workday seated.

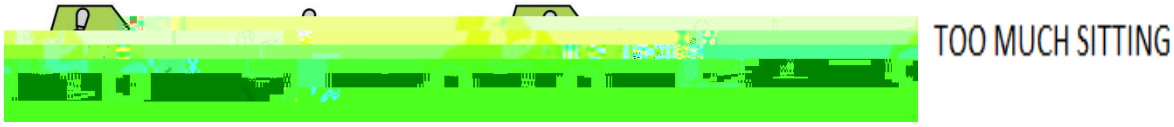
Is sitting the problem and standing the solution? Short answer: NO! Prolonged standing is linked to foot pain, varicose veins, and static muscle fatigue. It causes joints in the hips and knees to become temporarily immobilized in turn causing damage to tendons and ligaments. People who have sedentary jobs, even those who exercise for an hour or more several times per week, still have a higher risk for developing these illnesses or even dying prematurely (1). Movement is the key! We need movement, and more of it. Researchers recommend factoring more breaks into the workday and striking a balance between seated and standing positions (2, 3). Standing for 10-

This paper will detail the problems with sedentary work habits and its associated costs. It will also outline multiple solutions that can be incorporated to improve our employees' situations, thus lessening the risks, improving attitudes and productivity, and positively affecting the aforementioned costs.

PROBLEM

We have grown to realize that office workers, bolstered by recent research, sit for too long throughout the day. Add to that long commute times, sitting at meals, and engaging in sedentary activities at home, it becomes easy to see how cultural and lifestyle choices can be a negative force on our health status. Research shows that the average American spends an estimated 80% of time sitting while on a computer, on a portable device, watching TV, eating and/or commuting to work, etc.

Fig. 2



As pointed out in the introduction the risk of chronic diseases increases greatly for those who have these sedentary lifestyle habits. By some estimates, over 50% of the US population will become obese or diabetic by 2020. The economic costs associated with sedentary habits both to workers and their employers can be staggering.

Many times, efforts to promote more movement throughout the day and decrease sedentary habits have largely been lacking or ineffective. A survey was taken in 2013 of the various California State University Campuses about whether there was a program in place to teach stretching for employees. The majority of campuses had no formalized stretching, exercise, or movement program in place for employees.

This has likely changed to some extent since then, but we could all probably strive to do more. Even when classes or software is made available, participation and retention tend to be marginal at best (4, 5). When it comes to software solutions, some find that they are too busy when prompted or it pops up at an inconvenient time and they bypass the issue. For classes, convenience, flexible time to participate during the work day, and waning interest can all impact participation and retention. We also used to have a false sense of security when it came to exercising regularly. It used to be thought that regular exercise was a buffer against the consequences of working at a desk job. While people who exercise regularly tend to be more fit and healthy than those that do none, exercising outside of the work day does not mitigate or prevent the effects of sedentary work (1, 6).

The costs associated with sedentary habits in healthcare dollars, absenteeism, presenteeism, and decreased productivity add up to thousands of dollars for individual employees and tens of billions of dollars for all workers in the United States every year. Also, a RAND study from 1989 determined that the lifetime subsidy from others to those with a sedentary life style is $1907.00 (7). Studies performed from 2005-2007 that looked at data from the populations of Maine, California, and other states showed that the costs for medical care, workers' compensation, and lost productivity, were the higher for those who were inactive when compared to obesity and being overweight (8, 9). In the table below, which reflects data from California workers, losses from physical inactivity were roughly 40% higher than losses from obesity and overweight combined. One thing that is apparent from these studies and others like them is that the costs incurred as a result of both lifestyle, workplace culture, and workplace environment affect

us all in tangible economic ways. Whether we individually make healthy choices in the workplace or not, the actions of our colleagues also affect us. It follows that this effect is also translated to the organizations that we work for.

Fig. 3
Direct, Indirect, and Total Costs for Physical Inactivity, Obesity, and Overweight in California Adults (in Year 2000 Dollars).

	Medical Care Cost		*Compensation Cost*	*Lost Productivity Cost*		*Total Cost*
	Treatment	Cost of Prescription Drugs		Absenteeism, Presenteeism, and Short-term	On-the-job Injury	
Physical Inactivity						
Direct	$241,985,581	$1,065,943,038	$50,005,040	$7,528,629,764	$274,983,844	$9,161,574,267
Indirect	$725,956,744	$3,197,829,114	$200,020,159	0	0	$4,123,806,017
					Total Physical Inactivity Cost	**$13,285,353,284**
Obesity						
Direct	$135,520,641	$595,514,095	$17,658,344	$3,364,013,159	0	$4,112,706,239
Indirect	$406,561,922	$1,786,542,286	$70,633,376	0	0	$2,263,737,584
					Total Obesity Cost	**$6,376,443,823**
Overweight						
Direct	$93,509,242	$410,605,609	0	0	0	$504,114,851
Indirect	$280,527,726	$1,231,816,827	0	0	0	$1,512,344,553
					Total Overweight Cost	**$2,016,459,404**
				Total Cost of Physical Inactivity, Obesity, and		**$21,678,256,511**

SOLUTION

Generally speaking we need to stand more and we need to move

maintain bone and muscle density.

Strategically alternate tasks that require standing or moving. Alternatively, designate certain tasks as "standing tasks", such as talking on the phone. Use a device that tracks movement.	This is a way to break up the repetition associated with certain work. Modification of some work tasks may be required. No cost is associated.

9. Provide department incentives or rewards when possible, either for participation or for reaching certain milestones.

Like the methods of movement outlined above, one might not be able to incorporate all of these suggestions. For example, employees at a busy customer service counter cannot stop and all take a break together. They might have to focus on individual task breaks or maybe work with a partner instead. There is no "one" best or only way to promote and maintain a program. A flexible approach is E H V W « F R Q V L V W H Q W D Q G S H U V L V W H Q W

CONCLUSION

The data in the workers' compensation column of Figure 3 shows that approximately 73% of the total costs listed were related to physical inactivity. Internal data from all the CSU campuses show an expenditure of over 14 million dollars for workers' compensation from FY-2011-2015. That amounts to a potential pool of over 10 million dollars that could have been positively impacted by efforts to encourage workers to move more.

Changing the culture and attitudes of our workplaces in regards to movement and exercise will have a positive effect on employee participation and ultimately their health and well-being. The suggestions outlined above are not meant to replace any efforts that may be in place, but to augment them. The more tools we can give, along with the encouragement and acknowledgement of achievements, the more it will help to move employees toward the positive end of a wellness continuum. Programs should be fluid and ever-changing as new ideas and information become available. They can also be customizable. No two initiatives need be exactly the same, though they should be constructed with the goal of increasing participation and adherence through an institutional and culture shift. Positive changes have the potential for improving employee morale, health, and productivity, which can lead to substantial cost savings for the employer over time.

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