

# Commentary: Lifestyle Physical Activity Now More than Ever!

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**Abstract** Physical inactivity can lead to increased risk of numerous disease states including hyperlipidemia, stroke, coronary heart disease, diabetes, all of which can reduce life expectancy and quality of life. Over the past year, the COVID pandemic has wreaked havoc with the lifestyle of people world-wide. In many cases, lockdowns are proving to be a hardship on the overall quality of living including increased mental stress and depression, social isolation, as well as physical health. Having to socially and physically isolate can severely impact physical activity levels leaving many adults less physically active or even sedentary. With lack of time being the most commonly reported general barrier to PA chosen among all adults (again, regardless of country, gender or age), finding purpose, motivation and an easier way to incorporate PA into a daily routine is paramount. The following commentary discusses key strategies to maintain health during these challenging times, including: 1) Be less sedentary; 2) Stop feeling guilty if you do not enjoy the gym as a place to be physically active; 3) Walk, walk, walk; 4) Take advantage of your home space; 5) Let the inspiration of community and family yield careful interactive yet rewarding PA; 6) Go outdoors to enjoy the scenery and clear your mind; 7) Move and groove; 8) Follow a consistent routine for maximal health.

**Keywords:** *lifestyle physical activity, COVID, sedentary behaviour, MySafePandemic Activity*

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## 1. Background

The benefits of regular physical activity (PA) are well documented [1,2]. Conversely, physical inactivity can lead to cardiovascular risk factors such as hyperlipidemia, stroke, coronary heart disease, diabetes, and high LDL cholesterol levels [3,4,5], and is evident worldwide [6,7]. COVID-19 has dramatically changed the lives of people globally. First reported in Wuhan, Hubei Province, China, COVID 19 became a pandemic as announced by the World Health Organization.

In the United States and Canada, while some citizens can resume life as normally as possible with extra precautions, others are in lockdown. In many cases, lockdowns are proving to be a hardship on the overall quality of living including increased mental stress and depression, social isolation, as well as physical health [8]. In the United Kingdom, there has been a 50% increase in mental health problems due to COVID [9]. Having to socially and physically isolate can severely impact physical activity levels leaving many adults less physically active or even sedentary. Sedentary behavior can be defined as activities that entail prolonged sitting, lounging, or lying down which equate to 1.5 or less metabolic equivalent task (MET) while awake. Extended

time in front of the computer and TV, talking for long periods of time on the phone with family and friends are examples of a sedentary lifestyle. In addition, total sitting time of 8 hours per day, or more, have been associated with a greater risk of coronary heart disease and all-cause death [10]. Moreover, increased sitting time and physical inactivity can negatively affect the immune system giving way to potential infections compared to those who engage in PA [11,12].

In an international online survey, which primarily examined PA behaviors in Western Asia, North Africa, and Europe during COVID lockdowns indicated PA levels had decreased during home confinement. This result is similar to other studies which indicate a decrease in PA levels while at home [13,14] despite an increase of PA videos and workouts offered on social media [15]. In addition, adults reporting a higher BMI reported lower levels of PA [16,17], and therefore higher risks for all-cause mortality. In many areas, government officials that set up protocols limited trips to the grocery store, and restricted outside day-to-day errands, tasks, and responsibilities to essential workers leaving millions of people contained at home [18,19,20]. In addition, COVID-19 has generally forced more employees, globally, to work from home [13,21,22,23], and there is the likelihood that more employees will work from home post COVID pandemic than before the impact of the virus [24].

## 2. Recent Research Examining Preferences, Motivators and Barriers to Physical Activity in Southern Ontario and South Carolina

Studies were conducted with adults, aged 18 to 64 years, from various backgrounds in Southwestern Ontario and South Carolina [25,26]. Focus group participants shared their experiences and feelings with a trained investigator, with a focus on barriers, motivators, attitudes and preferences towards exercise and PA. Using the emerging themes from these focus group sessions, a survey was created to quantify and validate these findings. A major finding of our work is that the overwhelming majority of adult participants make a distinction between PA and exercise, regardless of gender or geographical location (74 to 84%), and also feel that engaging in lifestyle-oriented PA is more natural and enjoyable than exercise (74 to 83%).

Overall, 74% of the males and 57% of the females from Southern Ontario, and 67% of the males and 63% of the females from South Carolina thought that the recommended PA guidelines, which are shared by both Canada and the United States, could be achieved through lifestyle-oriented PA without formal exercise. This is important, as most participants felt that PA was easier to incorporate into their day than exercise (75-77%), particularly when goal-oriented or purpose-driven such as gardening, washing the car, walking to work (83-90%). Ultimately, most Southern Ontarians (males (65%), females (57%)) and South Carolinians (males (67%), females (64%)) also indicated a preference for natural, less-structured, lifestyle-oriented PA such as energetic yard work or brisk walking, compared to structured, traditional workout sessions.

One of the most significant finding of these studies was the fact that adults were strongly motivated by “feeling good and happier afterwards”; this was consistently ranked in the top three motivators to engage in PA and was surpassed only by “better health”. This affective component is essential for many to adhere to continued PA over a long period of time and is based on finding purpose and enjoyment. The implementation of successful strategies for the general public to engage in sufficient levels of PA must in large part be based on a better understanding of why people are not more physically active to begin with. To date, this has clearly not been the case. With lack of time being the most commonly reported general barrier to PA chosen among all adults (again, regardless of country, gender or age), finding purpose, motivation and an easier way to incorporate PA into a daily routine is paramount.

## 3. Strategies and Discussion

Keeping in mind that lifestyle PA is preferred over formal, traditional exercise in most adults [25,27,28], and understanding the negative impact COVID has had on many people maintaining mental and physical health due to mandatory lockdown, keeping active at home and in the

community is of paramount importance. Most people want to achieve their PA during the day while accomplishing various tasks and duties, and feel that PA guidelines can be accomplished through lifestyle-orientated PA alone [25,27,28]. However, being physically active is already challenging for most Americans and Canadians, and studies have indicated that sedentary behaviors have increased while working from home during the current pandemic [13]. It is important to keep in mind that multiple factors need to be considered when promoting PA at home coupled with the fact that “one size does not fit all” when it comes to PA. Participating in PA helps to cope with stress and staying at home can give working residents the opportunity to incorporate lifestyle PA in and around the house in a doable, realistic, natural, even enjoyable way to feel more relaxed and boost mental health [8].

As a result, emphasis must be placed on educating the public of not only the major health benefits gained in lifestyle PA but the importance of partaking in daily physically active tasks while working at home, in order to avoid the various health risks associated with sedentary behavior. No matter the environment, COVID-19 has changed the way people view their day-to-day lifestyle in a variety of ways including PA. Now more than ever, it is important to promote and educate lifestyle PA to the public.

The following are key strategies to maintain health during these challenging times:

**1) Be less sedentary.** It is important to move more, but it is just as important to be less sedentary. Take time away from the computer to stretch your arms and legs regularly, especially when seated for a while. Accomplish errands in the house every other television commercial break. Make life a little more difficult for yourself in a good way. For example, instead of taking the car to the car wash, wash it at home. Rather than carrying all the laundry upstairs, make two trips instead of one. Stand up! Stretch out the legs, arms, and body even just momentarily before going back to work or playing computer games.

**2) Stop feeling guilty if you do not enjoy the gym as a place to be physically active.** Research convincingly supports lifestyle-oriented PA to achieve better health and quality of living [29,30]. Since most people prefer not to go to the gym to engage in PA, it makes sense to focus on PA during the day tackling routine tasks and responsibilities around the home. So, get over it!! Stop feeling guilty for not changing into workout clothes and driving to the local gym. The good news is that activities can be chosen to involve all the major muscle groups while being moderately to vigorously active at home.

**3) Walk, walk, walk!** Take nature or neighborhood walks with the whole family.

Incorporate walking breaks and walking meetings at the workplace. Walk the dog around your neighborhood while feeling relaxed and stress free. When shopping, park further away from the store in the parking lot. Stride and accomplish a task around the house. For nearby destinations, walk as a form of active transportation instead of driving the car. Access the nearest walking trail and enjoy walking in an aesthetically pleasing environment. While physical distancing and wearing a mask, walk with a friend in the immediate area of the home.

**4) Take advantage of your home space.** A home is indoor and outdoor space where lifestyle PA can take place. No formal gym setting is needed to increase the heart rate stepping up and down the stairs, mowing the grass with a push mower, shoveling snow, or carrying heavy bags of groceries into the house. Cleaning and organizing means your body will move and be productive at the same time. Accumulate steps around the house performing routine tasks such as doing the laundry, vacuuming, making up the bed, clearing the table, loading the dishwasher, and organizing closets and storage spaces. Parents should be busy around the house as a model for their children and set an example. The COVID-19 pandemic has already influenced many homeowners to focus on outside activities such as gardening, landscaping, and general home improvement projects.

**5) Let the inspiration of community and family yield careful interactive yet rewarding PA.** Seek nearby green spaces, bike paths, parks, and pathways to get away from it all and rejuvenate. Refresh the mind with a change of scenery with an excuse to let your mind wander and think about nothing, or something! Safely deliver meals to those in need whether through an organization such as *Meals on Wheels* or walking to a neighbor’s house. Just make sure to keep an appropriate distance and wear your mask! Enjoy game night with the family playing favorite pastimes such as *Twister*, *Charades*, and *Reverse Charades*. Establish a friendly game of “chore competition” and the winner wins a prize.

**6) Go outdoors to enjoy the scenery and clear your mind.** Stroll, strut, stride, power walk, walk the dog, ride a bike, scooter, skateboard, skate outside to change up the

pace at home, relax, recreate, or just think in solitude. Dress in appropriate winter clothing (bundle up and layer) and embrace the outdoors; do not let the winter weather prevent you from taking a break from the indoors. According to Nguyen & Brymer [31], engaging in PA outdoors can boost happiness, enhance a more positive mood, improve self-esteem, increase energy, and lower stress.

**7) Move and groove.** Dancing at home can be a wonderful healthy way to stay physically active in a fun, upbeat, energetic way all while in the privacy of one’s home. Computer dance programs such as *Wii Fit*, *Wii Sport*, *Just Dance*, and *Dance Central*, can help improve balance, mobility, functional fitness, and overall physical and mental health. In addition, dance movements can improve overall well-being while expressing a wide range of emotions that can serve as an outlet for the young and elderly alike [32,33,34].

**8) Follow a consistent routine for maximal health.** Of course, this is easier said than done but try to set routine hours for sleep, PA, and meals [35]. This requires day to day discipline and some days are more difficult than others to achieve a routine in these three areas, but it is important not to lose focus of getting rest, being physically active, and eating regularly. Know your personality and personal style of doing whatever it takes to repeat these healthy habits daily. Having a dog that needs to be walked, a yard with grass that needs to be cut, a sidewalk or driveway that needs to be shoveled, a garden that needs weeds pulled, can form the basis of an action plan to accomplish household jobs, undertakings, and goals while developing a positive habit of engaging in lifestyle PA.

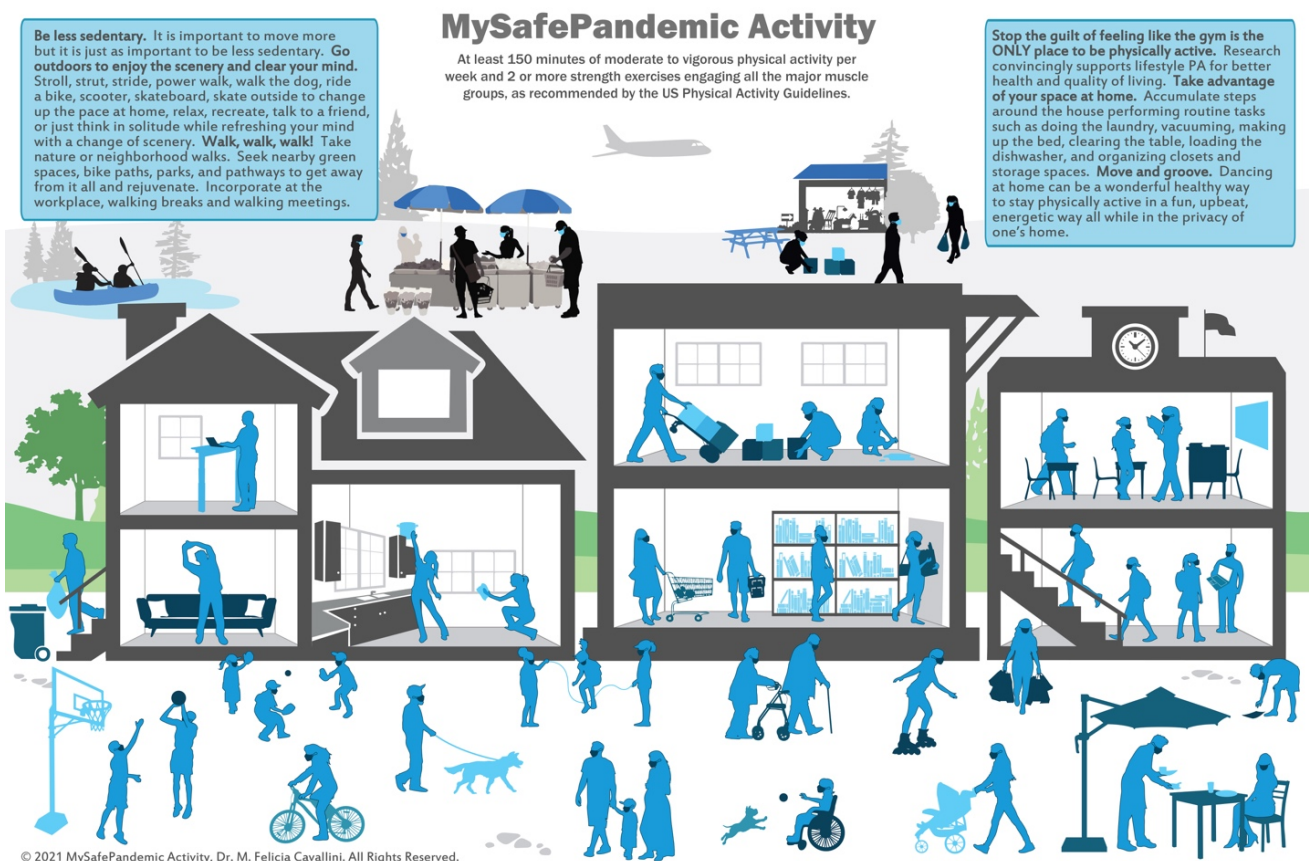


Figure 1.

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